CALIFORNIA
REGIONAL ECONOMIES PROJECT

CALIFORNIA ECONOMIC BASE REPORT: BAY AREA REGION

Prepared for the

CALIFORNIA
ECONOMIC
STRATEGY
PANEL

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California Economic Strategy Panel

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CALIFORNIA ECONOMIC STRATEGY PANEL

PREFACE

The bipartisan California Economic Strategy Panel (Panel) was established in 1993 to develop an overall economic vision and strategy to guide public policy. The Panel engages in an objective and collaborative biennial planning process that examines economic regions, industry clusters, and cross-regional economic issues. The 15-member Panel is comprised of eight appointees by the Governor, two appointees each by the California Senate President Pro-Tempore and the California Assembly Speaker and one appointee each by the Senate and Assembly Minority Floor Leaders. The Secretary of the California Labor & Workforce Development Agency serves as the Panel Chair.

The California Regional Economies Project is currently the lead research mechanism for the Panel to identify economic policy issues. The project provides the state's economic and workforce development systems with data and information about changing regional economies and labor markets. The information provides a new resource in economic and workforce development planning and a bridge connecting economic and workforce policies and programs at the state and regional levels.

Since 1996, the Panel recognized the rapidly changing nature of the California economy and its economic regions. In order to understand the state's economy and the changes taking place within industry sectors and industry clusters, it is important to recognize the regional nature of the economy and to analyze the economic base by region. To do this, the statewide and nine regional economic base reports analyze the patterns of employment, business establishments, wages, population, unemployment rate and other key factors.

This report presents a statewide overview and comparative analysis of the nine regions from 2001 to 2004. Also, in-depth economic base reports for each region are available. The previous economic base reports examined the 1990-2002 period, and were the first economic base reports for the regional economies as they are defined today. The Panel's initial work, from 1994-1996, resulted in identification of six regions and provided regional economic base analyses; however, those regions had been significantly redefined by 1998, making comparisons to the early analyses impractical.

The source of the data used for these reports is the official employment and wage information reported by employers to the State. While a variety of other sources provide similar information, they may not capture the official numbers that employers report, or may not include input from all employers. This data source is the most comprehensive and accurate source of information direct from employers, and is therefore the best to use for public policy-making, planning and program administration.

The Panel has taken steps to institutionalize the analysis and preparation of these economic base reports within State government so that this analysis may be provided on a yearly basis. Also, steps have been taken to leverage the body of knowledge that now exists around the study of industry clusters, gained through the California Regional Economies Project.

First, a non-confidential version of the data series, the *California Regional Economies Employment Series*, has been made available online by the California Employment Development Department's Labor Market Information Division so that regional organizations may access this data at the county level. Second, a step-by-step guide, the *Clusters of Opportunity User Guide,* is available online so that regional organizations can conduct industry cluster studies and work with business and industry to test and apply the findings. With this information, regional organizations may conduct their own economic base and industry cluster analyses down to the county level, and they may combine county data to create their own sub-regional study areas. Training workshops have been held to teach the methodology and processes outlined in the *Clusters of Opportunity User Guide* to representatives from local and regional organizations including Local Workforce Investment Boards, economic development organizations, and community colleges.

The statewide and regional economic base reports, the *Clusters of Opportunity User Guide* and other studies are available on the Panel's website at http://www.labor.ca.gov/panel/.

The *California Regional Economies Employment Series* is available online at http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=173.

The California Regional Economies Project is sponsored by the California Labor & Workforce Development Agency, California Employment Development Department, and California Workforce Investment Board.

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INTRODUCTION

The California Regional Economies Project provides data and information about changing regional economies and labor markets. The information provides a new resource in economic and workforce development planning, and a bridge connecting economic and workforce policies and programs at the state and regional levels.

In order to understand the state's economy and the changes taking place within industry sectors and industry clusters, it is important to recognize the regional nature of the economy and to analyze the economic base by region. To do this, the statewide and nine regional economic base reports analyze the patterns of employment, business establishments, wages, population, unemployment rate and other key factors.

This report presents an in-depth analysis of the Northern Sacramento Valley Region's economic base from 2001 to 2004. The previous economic base report examined the 1990-2002 period. The statewide and eight other regional economic base reports are also available at http://www.labor.ca.gov/panel/.

Data Sources

The Quarterly Census of Employment and Wages (QCEW) data is the source for the private industry data, which uses the North American Industry Classification System (NAICS) coding system. The Current Employment Statistics (CES) data is the source for all levels of government employment data. The CES data does not offer wage information, so the government wage information in this report was taken from the federal Bureau of Labor Statistics (BLS) QCEW non-confidential data available online. A more detailed explanation of the data sources is available in the statewide report.

Industry Clusters versus Sectors

An industry sector is a group of firms that are doing the same type of work, making the same type of products, or providing the same types of services. Examples include manufacturing, construction, retail trade and health care.

An industry cluster is a group of interdependent industry sectors characterized by competing firms and buyer-supplier relationships, as well as shared labor pools and other specialized infrastructure. They are also geographically concentrated. When identifying "industry clusters of opportunity," the Project adds additional considerations that focus on employment opportunities for regional residents.

Definition of the Economic Base Industries

Economists divide industries into two groups; export-oriented and local-serving (also referred to as population-driven). Export-oriented industries are industries that sell a large portion of their goods and services to people and businesses in markets outside of the region, creating capital (bringing capital into) the region. Local-serving industries are industries that sell their goods and services to people and businesses in markets within the region. These industries do not typically create new capital for the region, but recirculate it within the region.

In the previous economic base reports completed in 2004, the two principal researchers who provided the analyses did not agree on a common definition of an area's economic base. One favored the traditional approach, while the researcher analyzing the rural regions felt that there were key local-serving industries that were critical to these regions and should be included in the economic base.

For the current economic base reports, we have chosen to include some industries in our definition of the economic base that are not traditionally included. We do this in part due to the transformations taking place within the industries or regions, and also in recognition of the importance of industries that provide significant employment opportunities for the region, including some high-wage/high-demand sectors and clusters that would otherwise not be included.

While the traditional discussion of an economic base is still the one most used by economists, we feel the other perspective better fits the nature of the California Regional Economies Project, which constantly views the economy in new ways and from new perspectives in order to see transformations taking place. We acknowledge that this use of the term, "economic base," conflicts with the standard definition, and that we are choosing to redefine it for the purpose of these reports. We respect that some will disagree with our use of the term in this way; however, this should not detract from the important economic information presented in the reports. The current reports begin to address the differences in the definition of the regions' economic base industries, which began with the first economic base reports. We plan to revisit this issue again in the future.

A detailed discussion of the definition of the economic base and the differences between the previous and current reports is available in the statewide report.

Definitions by NAICS code for all of the industry sectors and clusters in the statewide overview and regional economic base reports may be found in Appendix A.

THE BAY AREA REGION

The Bay Area Region includes eleven counties — Alameda, Contra Costa, Marin, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma. This region accounts for 23% of California's jobs and 20% of its population. The region's unemployment rate in 2005 was 5.1%, below the state average of 5.4%.

From 1990 to 2003, the Bay Area Region experienced overall job growth of 11%, as reported in the first economic base report; however, job growth had already started to reverse with the recent recession, which was felt the most in this region. From 2001 to 2004, the region experienced net job losses of over 8%. During this period, private industry jobs decreased by over 9% while Government jobs decreased by 0.1%.

Characteristics of the Bay Area Region

(Numbers are in thousands, except for dollar amounts)

	Bay Area	California	Bay Area as % of CA
Population (2006)	7,446	37,172	20%
Labor Force (2005)	3,706	17,696	21%
Unemployment Rate (2005)	5.1%	5.4%	94%
Manufacturing Jobs* (2004)	362.9	1,507.8	24%
Per Capita Income (2004)	$ 46,927	$ 35,219	133%
Average Wage (2004)	$ 57,299	$ 43,724	131%

Source: Jobs, Labor Force, Unemployment Rate and Average Wage – California Employment Development Department, Labor Market Information Division; Population and Per Capita Income – U.S. Bureau of Economic Analysis

* Manufacturing Jobs reported here are traditional production jobs (NAICS 31-33).

During the period 2001-2004, the Bay Area Region reported a net increase of 15,800 private industry establishments (up 7%), to almost 240,600 in 2004. The number of establishments has grown steadily from 2001-2004, despite the significant job losses during the same period. The industry sectors reporting the greatest increase in number of establishments were Private Households (adding almost 15,300 establishments), Food Services & Drinking Places (adding over 750 establishments), and Ambulatory Health Care Services (adding over 700).

THE ECONOMIC BASE

The economic base is traditionally considered to be made up of export-oriented industries in the study area - industries that sell a large portion of their goods or services to people and businesses in markets outside of the area. For the purpose of this report, we have chosen to include industries in our definition of the economic base that are not traditionally included. We acknowledge that our definition of the economic base differs from standard practice. We do this in part due to the transformations taking place within the industries or region, and also in recognition of the importance of industries that provide significant employment opportunities for the region, including some high-wage/high-demand industries that would otherwise not be included.

Economic base reports also typically look only at industry sectors; however, this analysis will also include industry clusters, where studies by the California Regional Economies Project have defined clusters that provide significant employment for the region[1].

The criteria for selecting the components of the economic base include the top job providers in 2004, those industries with a high growth rate from 2001 – 2004, and the top job generators from 1990 to 2002, as identified in the previous economic base report. In those cases where industry clusters are examined beginning with the 2001-2004 period, direct comparisons may not be possible with the findings from the first economic base report.

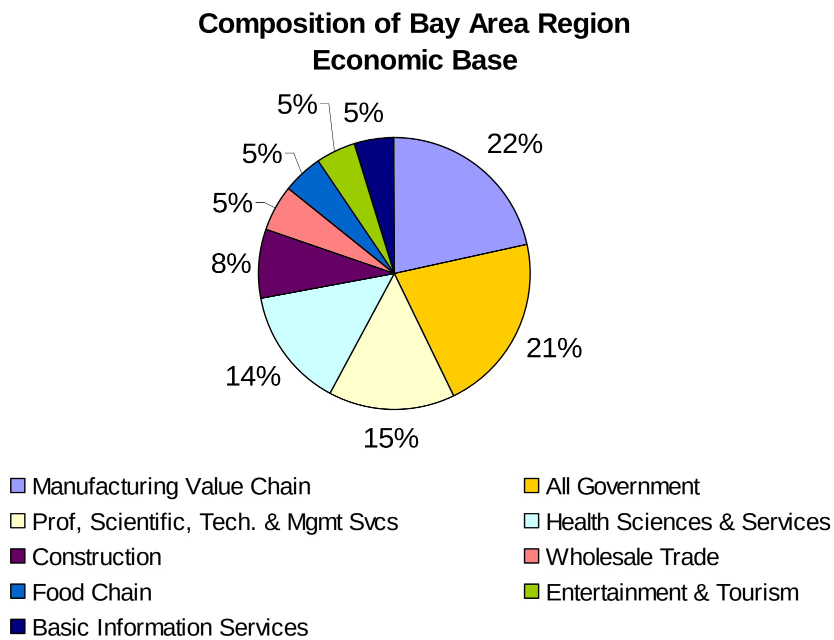
Based on these criteria, the industry clusters and industries included in the Bay Area Region's economic base for this analysis are the following[2], listed by NAICS code:

The Food Chain
Construction
Manufacturing Value Chain
Wholesale Trade
Health Sciences & Services
Basic Information Services
Professional, Scientific, Technical & Management Services
Entertainment & Tourism
All Government

The total jobs reported by the economic base industries and clusters represent 69% of the region's total jobs. From 2001-2004, the economic base lost 275,700 jobs, or just

[1] Industry Clusters of Opportunity are defined by the California Regional Economies Project as geographically-concentrated, and interdependent industry sectors characterized by competing firms and buyer-supplier relationships, as well as shared labor pools and other specialized infrastructure. In addition to export-oriented sectors, they also include population-driven sectors as well as sectors that offer occupations with career potential.
[2] See Appendix A for a complete listing of all sub-sectors included in the economic base industries and industry clusters.

over 8%. All sectors and clusters reported job losses except the Health Sciences & Services cluster, which grew by 1.6%.



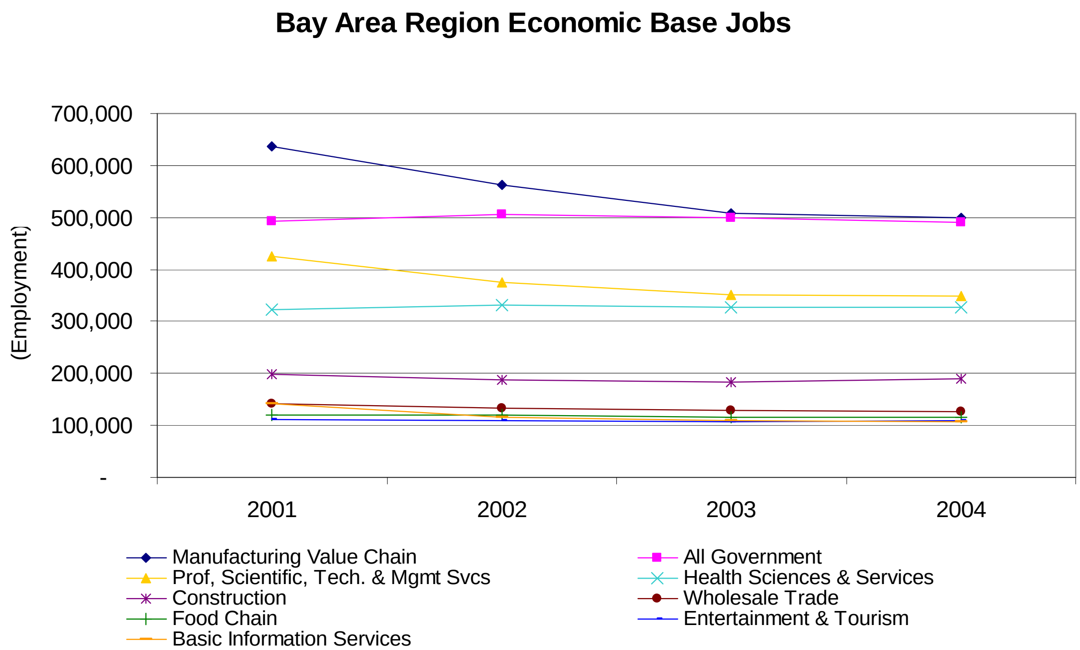
(Industries are listed in order as they appear in the chart, reading left to right across columns.)

The Manufacturing Value Chain provided the most jobs for the region, with 500,300 jobs in 2004. This represents 22% of the economic base jobs, and 15% of the region's total jobs. All Government was a close second with 491,700 jobs, which was just over 21% of the economic base and almost 15% of all jobs.

Professional, Scientific, Technical & Management Services was the third largest component of the economic base, with 426,300 jobs in 2004; 15% of the region's economic base jobs. This was followed by Health Sciences & Services, reporting 322,500 jobs (over 14% of the base); and Construction, with almost 190,200 jobs (over 8% of the base).

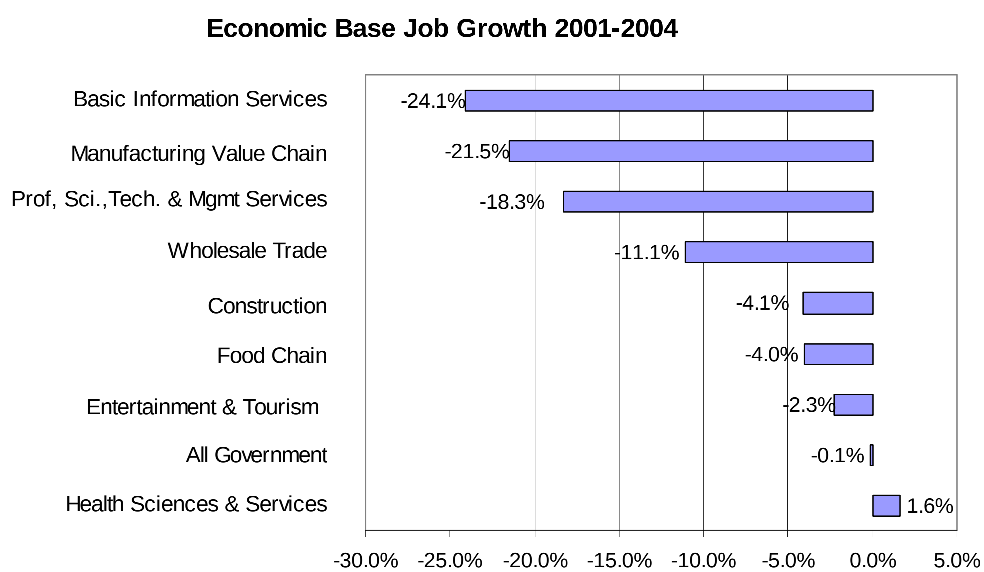
The remaining industries in the economic base are Wholesale Trade (126,100 jobs), The Food Chain (almost 115,200 jobs), Entertainment & Tourism (over 108,600 jobs), and Basic Information Services (over 107,200 jobs).

The following graph shows employment for the economic base industries and clusters from 2001-2004:

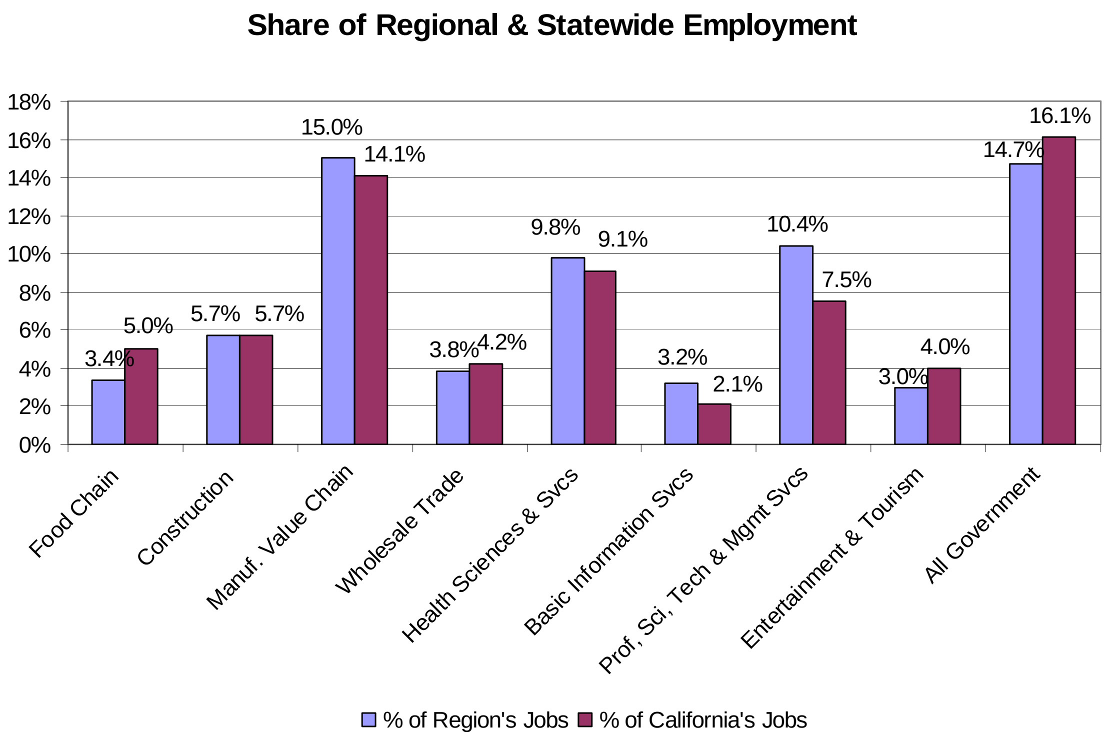


In addition to size, another important measure is job growth. **From 2001-2004, only the Health Sciences & Services cluster reported growth. The cluster grew by 5,200 jobs, or 1.6%; from over 322,500 jobs in 2001 to almost 327,800 jobs in 2004.** The remaining industries reported job losses from 0.1% to over 26% for the period.

The following graph shows the job growth and losses from 2001-2004:



Another factor to consider is the concentration of an industry within a region – the percentage of the region's jobs that the industry provides – and also how this compares to the concentration within the state or nation. The following graph compares the concentration of the leading employment sectors in the region to the statewide concentration.



The average annual wage[3] for all industries in the Bay Area Region is $57,299. This region has the highest overall average wage of the nine regions. Within the region's economic base, the average annual wage by industry and cluster ranges from a high of $111,349 for Basic Information Services jobs, to a low of $32,498 for Entertainment & Tourism jobs. (Wages for the All Government industry are not available.)

The Basic Information Services industry reports the highest average wage but provides just 5% of the jobs in the region's economic base. Professional, Scientific, Technical & Management Services has the second highest average wage at $91,609, and provides 15% of the economic base jobs. Entertainment & Tourism, which reported the lowest averages wages, provides only 5% of the economic base jobs.

Basic Information Services also reported the greatest (percentage) increase in average wages from 2001 to 2004, rising over 22%, from $90,941 in 2001 to $111,349 in 2004; the industry provides 5% of the region's economic base jobs. Health Sciences &

[3] The average annual wage is calculated by dividing the total wages by the total employment (both figures are reported by the employers); the wages and employment data reported do not distinguish between part and full time hours or overtime hours worked. This statistic provides good information for making comparison and tracking trends; however, it may not be the best resource available for employers or researchers and service providers to use when determining a competitive or typical pay scale for employees in a particular industry and/or region.

Services reported the second largest increase in wages, from $51,307 to $60,984, or almost 19%. The industry or cluster reporting the least change was Construction, which actually experienced a slight decrease of 0.6%, from $51,659 to $51,334.

The following table provides the average annual wage for each industry and cluster in the region's economic base, and compares these to the statewide averages. It also shows the percentage of the economic base jobs that each industry/cluster provides, to point out the percentage of jobs in the higher and lower paying industries/clusters.

Average Annual Wages 2004	**Statewide**	**Bay Area Region**	**% of Region's Economic Base Jobs**
ALL INDUSTRIES	$ 43,724	$ 57,299	
Food Chain	31,939	39,676	5%
Construction	43,707	51,334	8%
Manufacturing Value Chain	54,162	76,042	22%
Wholesale Trade	28,546	64,649	5%
Basic Information Services	83,197	111,349	5%
Prof, Scientific, Tech. & Mgmt Services	71,904	91,609	15%
Health Sciences & Services	49,205	60,984	14%
Entertainment & Tourism (Urban)*	20,802	32,498	5%
All Government	47,835	53,981	21%

** The definition of the Entertainment & Tourism industry differs from urban to rural regions, for the purpose of this report. For urban regions, Entertainment & Tourism combines Arts, Entertainment & Recreation with Accommodation and Motion Picture & Sound Recording Industries; it does not include Food Services. For rural regions, Entertainment & Tourism combines Accommodation & Food Services with Arts, Entertainment & Recreation; it does not include Motion Picture & Sound Recording Industries. For the statewide analysis, the Entertainment & Tourism industry combines Accommodation & Food Services with Arts, Entertainment & Recreation, and also includes Motion Picture & Sound Recording Industries.*

*** Government average annual wages include the wages for a broad spectrum of jobs, including elected officials and executive branch, judicial, defense, law enforcement, firefighting, education and other public administration jobs. The source for this data is the Bureau of Labor Statistics (BLS) online QCEW data, as the CES data used for the government employment numbers does not include wage information. Wage data for some counties was suppressed.*

The remainder of this report discusses each economic base industry or cluster in further detail.

THE FOOD CHAIN

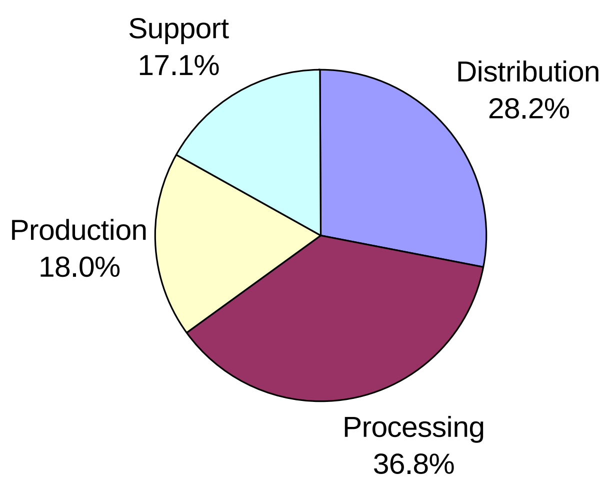
The Food Chain cluster has been defined by the California Regional Economies Project as including not only Production sectors, but also Support, Processing and Distribution sectors. The previous economic base report only looked at agriculture as a part of the Resource Based industries. This report will instead look at the Food Chain cluster.

The Food Chain cluster provides 5% of the economic base jobs for the Bay Area Region, and 3.4% of all jobs in the region.

From 1990-2002, the Agriculture, Forestry, Fishing & Hunting industry employment grew very slightly from 33,300 jobs in 1990 to 33,400 jobs in 2002. Fruit & Vegetable Preserving lost jobs, from 12,100 in 1990 to 4,500 jobs in 2002.

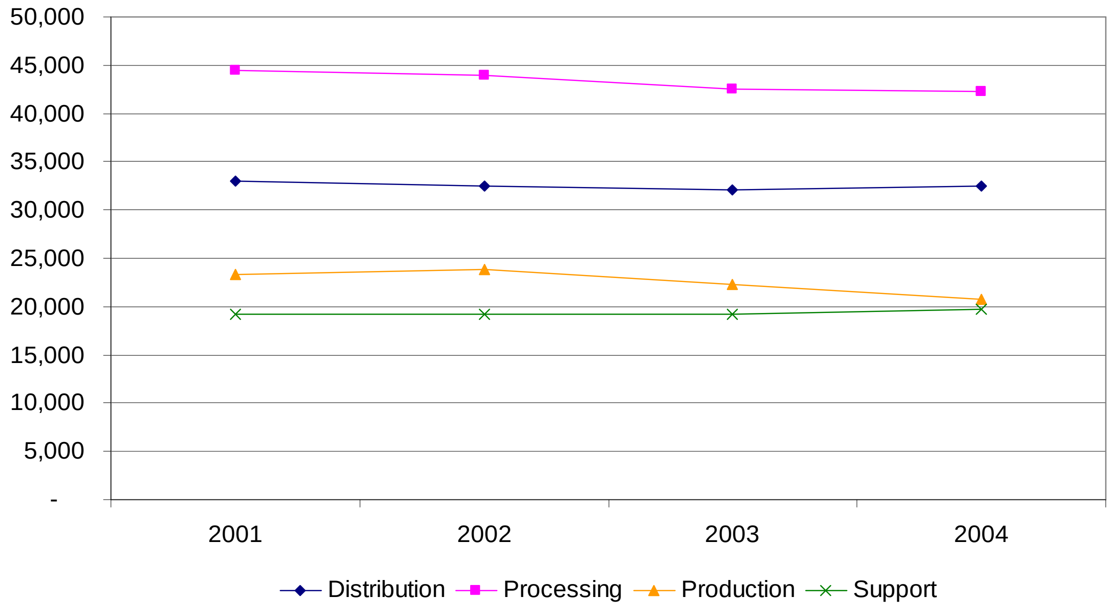
For the 2001-2004 period, the Food Chain cluster experienced net job losses of over 4,700 jobs, or 4%, dropping from 119,900 jobs in 2001 to almost 115,200 jobs in 2004. In 2004, Support represented 28% of the cluster; Production represented 24%; Processing represented 25%; and, Distribution represented 23%.

The Bay Area Region Food Chain
2004



From 2001-2004, Production lost almost 2,600 jobs (down 11%), Processing lost over 2,100 jobs (down almost 5%), and Distribution lost 500 jobs (down 1.5%). Only the Support component reported job growth, growing by almost 500 jobs or over 2%.

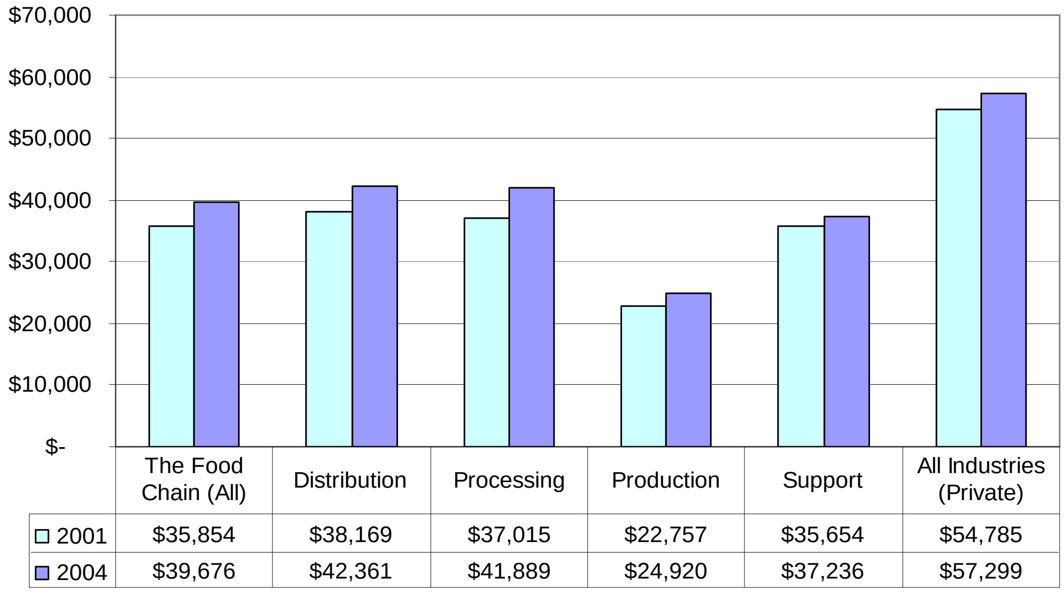
Food Chain Jobs



Within Support, the largest sub-sector is Veterinary Activities, followed by Support Activities for Crop Production. Within Production, the largest sub-sector by far is Fruit & Tree Nut Farming, with 11,700 jobs – over three times that of the second largest sub-sector, Vegetable & Melon Farming. Within Processing, the largest sub-sector is Wineries, with over 14,300 jobs, followed by Bakeries & Tortilla Manufacturing and Fruit & Vegetable Preserving & Specialty Food Manufacturing. Within Distribution, the largest sub-sector is Grocery & Related Product Wholesalers, followed by Specialty Food Stores.

The Food Chain cluster's average annual wage for the region in 2004 was $39,676. Within the cluster, for Support jobs the average annual wage was $37,236; for Production jobs the average was $24,920; for Processing jobs the average was $41,889; and, for Distribution jobs the average was $42,361.

The Food Chain Wages



The following table provides information on employment by major component:

Bay Area Region
Food Chain
(Thousands of Jobs)

	2001	2002	2003	2004
Support	19.2	19.2	19.2	19.7
Production	23.3	23.8	22.2	20.7
Processing	44.4	44.0	42.5	42.3
Distribution	33.0	32.5	32.1	32.5

Source: California Employment Development Department

CONSTRUCTION

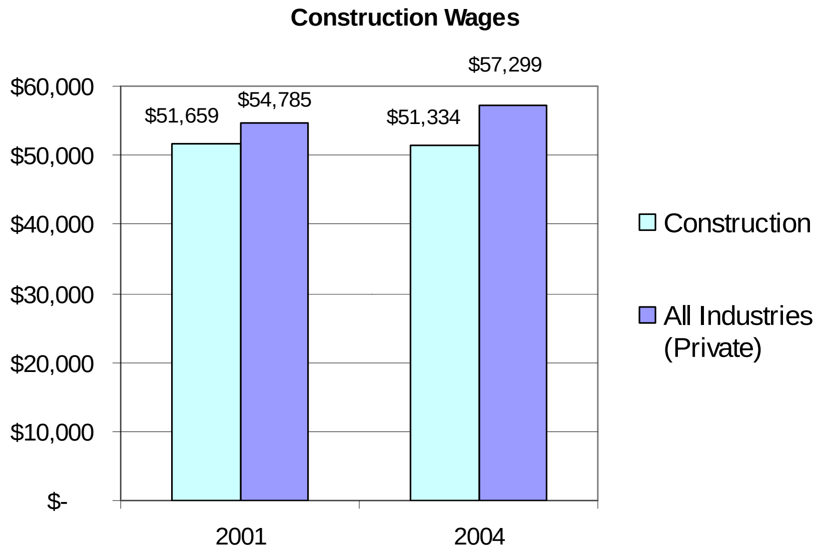
The Construction industry provided over 8% of the economic base jobs for the Bay Area Region in 2004, and almost 6% of all jobs in the region.

Employment in Construction fell during the first part of the 1990 – 2002 period, but began a steady increase from 1995 to 2001, with a drop in 2002. Construction has some cyclical factors and some long-term (population and income) growth factors underlying the sector's job growth trends, as reported in the previous economic base report.

From 2001-2004, Construction jobs in the Bay Area decreased by almost 8,200 jobs, or over 4%. Of the three main sectors, Construction of Buildings – the second largest sector – was the only one to report job growth, at just over 2%. Specialty Trade Contractors provides the most jobs, with almost 118,800 jobs in 2004, but experienced losses of 6% for the period. Heavy & Civil Engineering Construction experienced job losses of 9%, and reported just over 17,600 jobs in 2004.

Of the four largest sub-sectors, two reported job growth from 2001 to 2004, and two reported job losses. Building Finishing Contractors was the largest sub-sector in all of the Construction industry in 2004, with almost 42,300 jobs; however, the sub-sector experienced losses of 14% from 2001-2004. Second, Residential Building Construction reported over 37,200 jobs and growth of 12.5% from 2001-2004. Building Equipment Contractors was third, with almost 36,800 jobs in 2004, and almost 1% growth during this period. The fourth largest sub-sector was Foundation, Structure & Building Exterior Contractors, with over 24,600 jobs, but job losses of 3% from 2001-2004.

The industry's average annual wage for the region in 2004 was $51,334, down slightly (0.6%) from the 2001 average of $51,659. Construction provides 8% of the region's economic base jobs. The following chart shows the changes from 2001 to 2004 and compares the industry's average with the region's overall average wage (all industries).



The following table provides information on employment in the Construction industry:

Bay Area Region
Construction
(Thousands of Jobs)

	2001	2002	2003	2004
Residential Building Construction	33.1	34.3	35.2	37.2
Nonresidential Building Construction	19.6	17.6	16.6	16.6
Utility System Construction	6.5	9.0	6.3	6.5
Land Subdivision	3.3	3.2	2.7	2.6
Highway, Street & Bridge Construction	7.5	7.4	6.8	6.7
Other Heavy & Civil Engineering Construction	2.1	2.2	1.9	1.9
Foundation, Structure, & Exterior Contractors	23.3	24.0	23.2	24.6
Building Equipment Contractors	49.2	44.8	42.1	42.3
Building Finishing Contractors	36.6	33.5	34.1	36.8
Other Specialty Trade Contractors	15.2	15.3	14.8	15.1

Source: California Employment Development Department.

MANUFACTURING VALUE CHAIN

Manufacturing industries are important for innovation, high wages and exports. Yet, the production component of manufacturing is not likely to be a growing source of job growth for the region or the state.

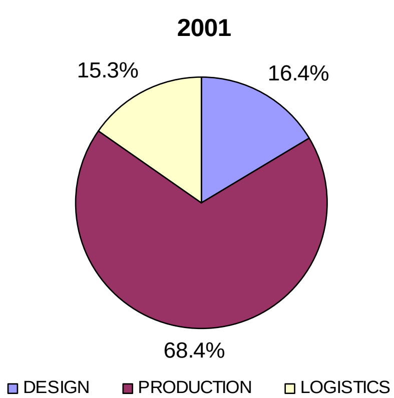
California's manufacturing industry is undergoing a transformation. While traditional manufacturing (production) jobs are declining, job growth is occurring in the design and logistics (warehousing and delivery) phases of manufacturing. Improvements in production technology have impacted the number of production jobs while the "just in time" approach to supply and delivery is lowering warehousing costs and has increased the number and types of jobs in logistics.

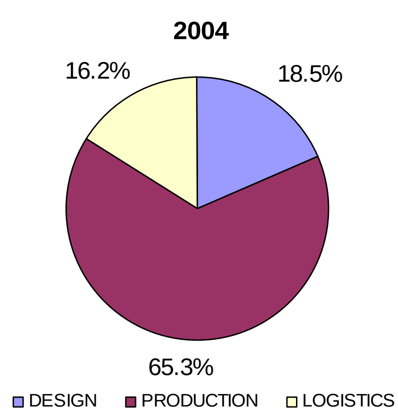
The California Regional Economies Project calls this industry cluster the Manufacturing Value Chain. The design and logistics components of manufacturing are providing more middle and higher-level jobs that pay well and offer career development opportunities.

Manufacturing remains a critical component of the Bay Area Region's economy. The Manufacturing Value Chain cluster provides almost 22% of the jobs in the region's economic base, and 15% of all jobs in the region.

In 2004, Design represented 18.5% of the jobs in the Manufacturing Value Chain cluster; Production represented over 65%; and, Logistics represented over 16% of the cluster. Since 2001, the Logistics share of the cluster employment has increased, as has the Design component share. At the same time, Production jobs have decreased. All three components lost jobs from 2001 – 2004, with the cluster's overall job losses at 21.5%; Production lost the greatest percentage of jobs (25%).

The following graph illustrates how Design, Production and Logistics jobs have changed in the region from 2001 to 2004:





Within the Design component of the Manufacturing Value Chain, the Architectural, Engineering & Related Services sub-sector provided the most jobs in 2004, with over 43,100 jobs. This sub-sector reported job losses of over 20%. The second largest sub-sector in Design was Management, Scientific & Technical Consulting Services, with almost 30,900 jobs. This sub-sector reported job growth, if only 1%.

Within Production, the Semiconductor & Other Electronic Component Manufacturing sub-sector reported the most jobs (almost 61,800), but experienced significant losses of 30% from 2001 to 2004. Second, the Computer & Peripheral Equipment Manufacturing sub-sector reported almost 38,600 jobs in 2004, but experienced significant job losses of 34% for the period. The third largest Production sub-sector, Navigational, Measuring, Electromedical & Control Instruments provided over 34,100 jobs in 2004, but also experienced significant job losses (over 26%). The two sub-sectors that added the most jobs (not highest percentage) were Motor Vehicle Manufacturing, up almost 900 jobs, and Aerospace Product & Parts Manufacturing, up almost 700 jobs.

Within Logistics, the Scheduled Air Transportation sub-sector provided the most jobs (almost 19,800), followed by Couriers (almost 15,500 jobs); however, both reported significant job losses, 32% and 22% respectively. The sub-sector that added the most jobs was Support Activities for Air Transportation, which added almost 1,500 jobs for growth of 59%, growing from 2,500 jobs in 2001 to almost 4,000 jobs in 2004.

TWO KEY SECTORS WITHIN TRADITIONAL MANUFACTURING

The previous economic base report looked specifically at the Diversified Manufacturing and High Tech Manufacturing sectors. Each is discussed briefly below, to provide an update on these key sectors.

Diversified Manufacturing

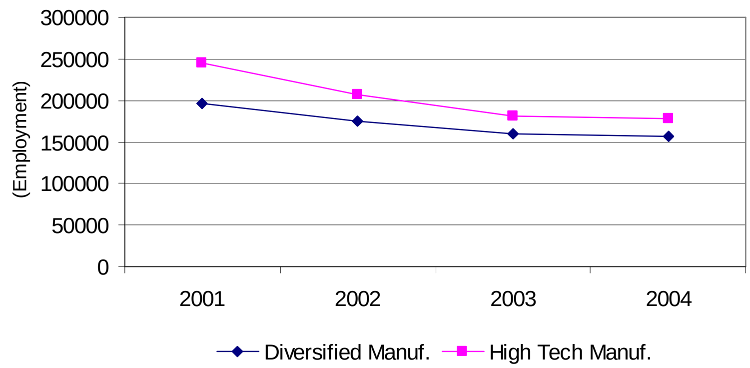
Diversified Manufacturing provided almost 5% of the jobs in the Bay Area Region in 2004. After the recession of the early 1990's, the industry reported strong job growth between 1995 and 2000, with a dip in 1999. Then, during the recession in 2001, job losses were significant. From 2001 to 2004, Diversified Manufacturing lost almost 40,800 jobs, or almost 21%.

Within the Diversified Manufacturing industry, the larger sectors based on employment include Fabricated Metal Product Manufacturing (led by Machine Shops); Machinery Manufacturing (led by Industrial Machinery Manufacturing); Miscellaneous Manufacturing (led by Medical Equipment & Supplies Manufacturing); and, Beverage Manufacturing. All four reported job losses for the 2001-2004 period.

High Tech Manufacturing

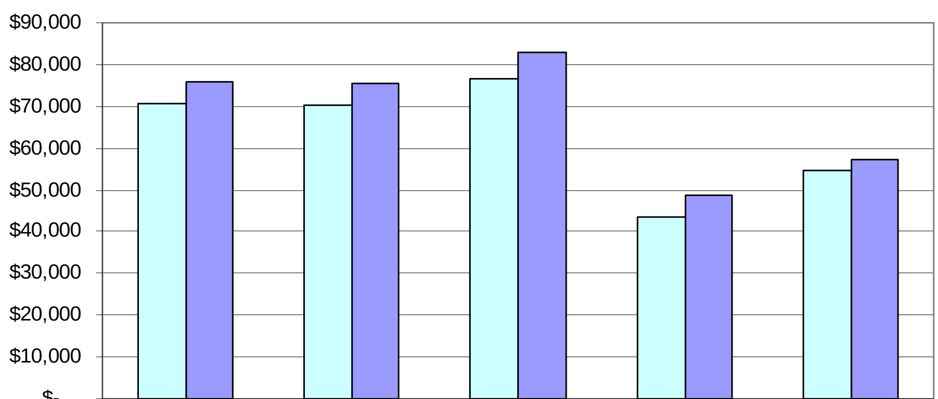
The first economic base report showed that High Tech Manufacturing job levels fluctuated between 200,000 and 250,000 with job losses occurring in each of the two recession periods. Jobs fell from 1990 to 1994, and then rose through 2000, with a dip in 1999. From 2001-2004, during and after the recent recession, jobs fell again, to a low of 177,400 jobs; this reflected losses of over 67,100 jobs for the period, or over 27%. In the past, the region's high tech manufacturing jobs were concentrated in three sectors; Semiconductors & Other Electronic Component Manufacturing, Computer & Peripheral Equipment Manufacturing, and Electronic Instruments (Navigational, Measuring, Electromedical & Control Instruments). These continue to be the leading sectors for employment, although all reported significant job losses of 26% to 34% from 2001-2004.

Diviersified and High Tech Manufacturing Jobs



The Manufacturing Value Chain cluster's average annual wage for the region in 2004 was $76,042, up almost 8% from the 2001 average of $70,614. Within the cluster, the component with the highest average annual wage is Production, with an average of $83,015 in 2004. The Manufacturing Value Chain provides 22% of the region's economic base jobs. The following chart graphs the changes from 2001 to 2004 and compares the industry's average with the region's overall average wage (all industries).

The Manufacturing Value Chain Wages



	Manufacturing Value Chain (All)	Design	Production	Logistics	All Industries (Private)
2001	$70,614	$70,167	$76,747	$43,631	$54,785
2004	$76,042	$75,417	$83,015	$48,649	$57,299

WHOLESALE TRADE

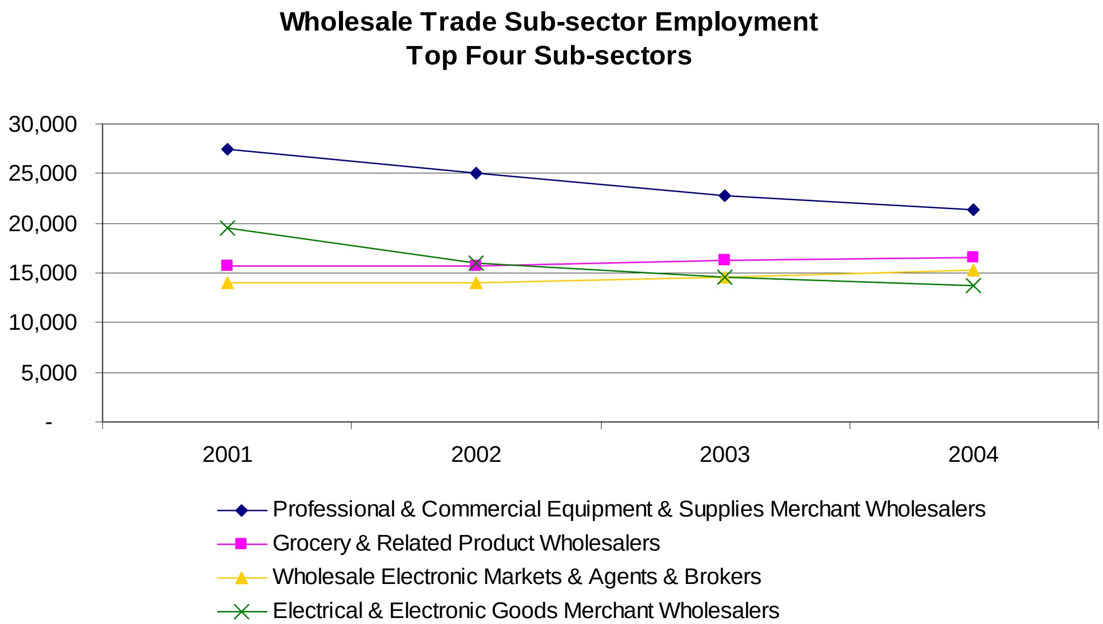
Wholesale Trade provided over 5% of the economic base jobs for the Bay Area Region in 2004, over 126,100 jobs, and almost 4% of all jobs in the region.

During the period of 1990-2002, Wholesale Trade employment grew from 107,700 jobs to about 118,700 jobs, an increase of about 10%. Growth peaked in 2000, and then fell during and after the recent recession. (The data for the 1990-2002 period include Wholesalers of Durable Goods and Wholesalers of Nondurable Goods; the data for the 2001-2004 period adds Wholesale Electronic Markets & Agents & Brokers, so totals will differ for the overlapping years.)

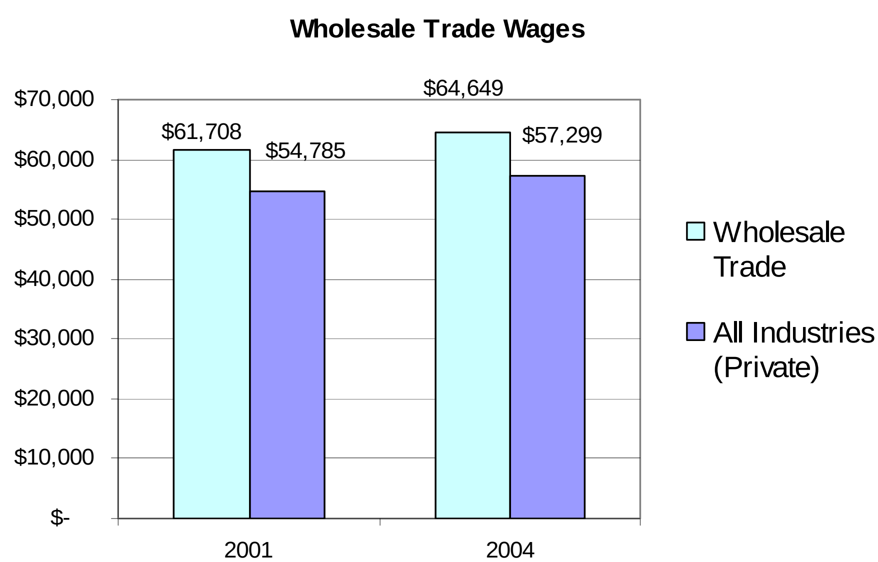
For the 2001-2004 period, Wholesale Trade lost almost 15,600 jobs, dropping from 141,800 in 2001 to 126,100 in 2004 – a loss of 11%. During this time, the two main sectors, Wholesalers of Durable Goods and Wholesalers of Nondurable Goods, both reported job losses. The smaller sector, Wholesale Electronic Markets & Agents & Brokers, grew by almost 1,400 jobs, representing growth of about 10%.

Within the Wholesale Trade industry, the sub-sectors providing the greatest number of jobs are Professional & Commercial Equipment & Supplies Merchants (over 21,300 jobs in 2004); Grocery & Related Product Wholesalers (almost 16,600 jobs); Wholesale Electronic Markets & Agents & Brokers (over 15,300 jobs); and, Electrical 7 Electronic Goods Merchant Wholesalers (almost 13,800 jobs).

The following graph shows job growth for the top four sub-sectors from 2001-2004:



The industry's average annual wage for the region in 2004 was $64,649, up almost 5% from the 2001 average of $61,708. The following chart graphs the changes from 2001 to 2004 and compares the industry's average with the region's overall average wage (all industries).



The following table provides information on employment in the Wholesale Trade industry:

Bay Area Region
Wholesale Trade
(Thousands of Jobs)

	2001	2002	2003	2004
Motor Vehicle, Parts, Supplies Wholesalers	5.7	5.4	4.5	4.1
Furniture & Home Furnishing Wholesalers	4.2	3.8	3.9	4.0
Lumber & Construction Materials Wholesalers	4.4	4.4	4.7	4.8
Prof. & Commercial Equip. & Supplies Wholesalers	27.5	25.1	22.8	21.3
Metal & Mineral (except Petroleum) Wholesalers	2.1	1.7	1.4	1.3
Electrical & Electronic Goods Wholesalers	19.5	16.0	14.6	13.8
Hardware, Plumbing, Heating & Supplies Wholesalers	3.9	4.1	3.9	3.6
Machinery, Equipment, & Supplies Wholesalers	11.4	10.4	9.7	9.7
Miscellaneous Durable Goods Wholesalers	7.2	6.6	6.3	6.2
Paper & Paper Product Wholesalers	3.7	3.3	2.8	2.7
Drugs and Druggists' Sundries Wholesalers	1.8	2.4	2.5	3.0
Apparel, Piece Goods, & Notions Wholesalers	2.8	2.7	2.7	2.9
Grocery & Related Product Wholesalers	15.7	15.8	16.3	16.6
Farm Product Raw Material Wholesalers	0.1	0.1	0.2	0.1
Chemical & Allied Products Wholesalers	3.5	3.1	3.2	3.2
Petroleum & Petroleum Products Wholesalers	1.8	1.6	1.5	1.3
Beer, Wine, & Distilled Alcoholic Bev. Wholesalers	4.2	4.3	4.3	4.4
Miscellaneous Nondurable Goods Wholesalers	8.4	8.1	8.1	7.8
Wholesale Electronic Markets & Agents & Brokers	14.0	14.0	15.6	15.3

Source: California Employment Development Department.

HEALTH SCIENCES & SERVICES

For the previous economic base report, the Health Care & Social Assistance industry was used for studying employment in health care. The industry also included social services. For this and future reports, the Health Sciences & Services industry cluster will be used instead of Health Care & Social Assistance.

The Health Sciences & Services cluster includes health care services, such as offices of physicians, dentists, other health practitioners and other outpatient care facilities; hospitals; laboratories; home health care; nursing care and other residential care facilities. It also includes community, emergency and other relief services; vocational rehabilitation services; and, death care services. Within health sciences, the cluster includes pharmaceutical and medicine manufacturing; medical equipment and supplies manufacturing; and, scientific research and development (R&D) services.

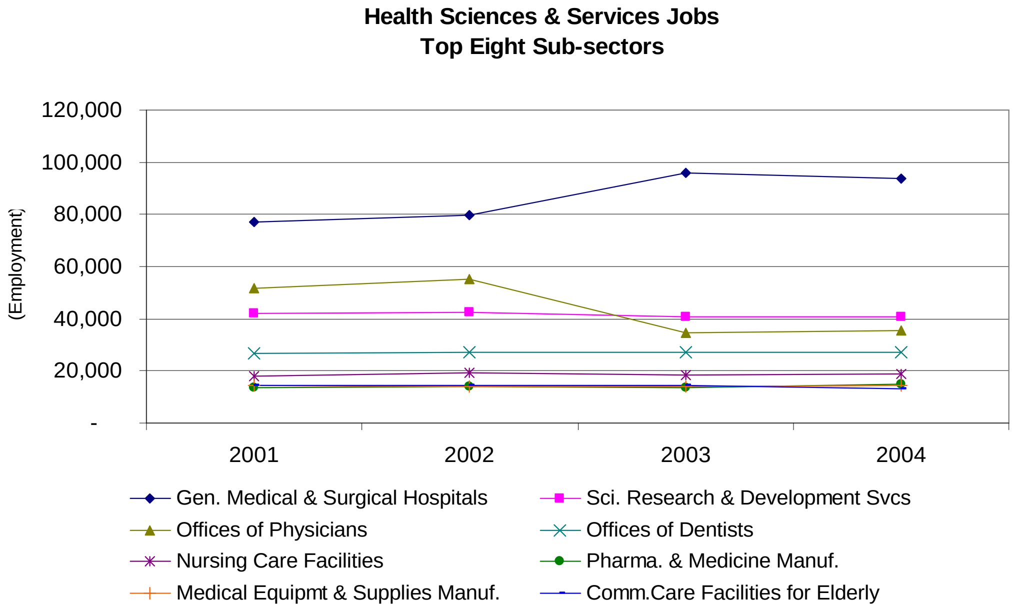
In 2004, the Health Sciences & Services cluster was the fourth largest component of the Bay Area Region's economic base, providing almost 327,800 jobs – over 14% of the economic base jobs, and almost 10% of all jobs in the region.

From 1990-2002, the Health Sciences & Services cluster experienced growth with a slight decline from 2000 – 2002, when the average annual growth rate dropped from 4% (1994-2000) to 3%, as reported in the study, *Golden Opportunity, Growing Crisis: The Health Sciences and Services Cluster (September 2004)*. During the 1990-2002 period, the strongest sectors were in Health Sciences, with higher concentrations relative to the U.S. in Medical Testing & Labs, Research & Development, Pharmaceuticals and Medical Equipment & Devices. In Health Services, job growth was highest in Home Health and Residential Nursing Care.

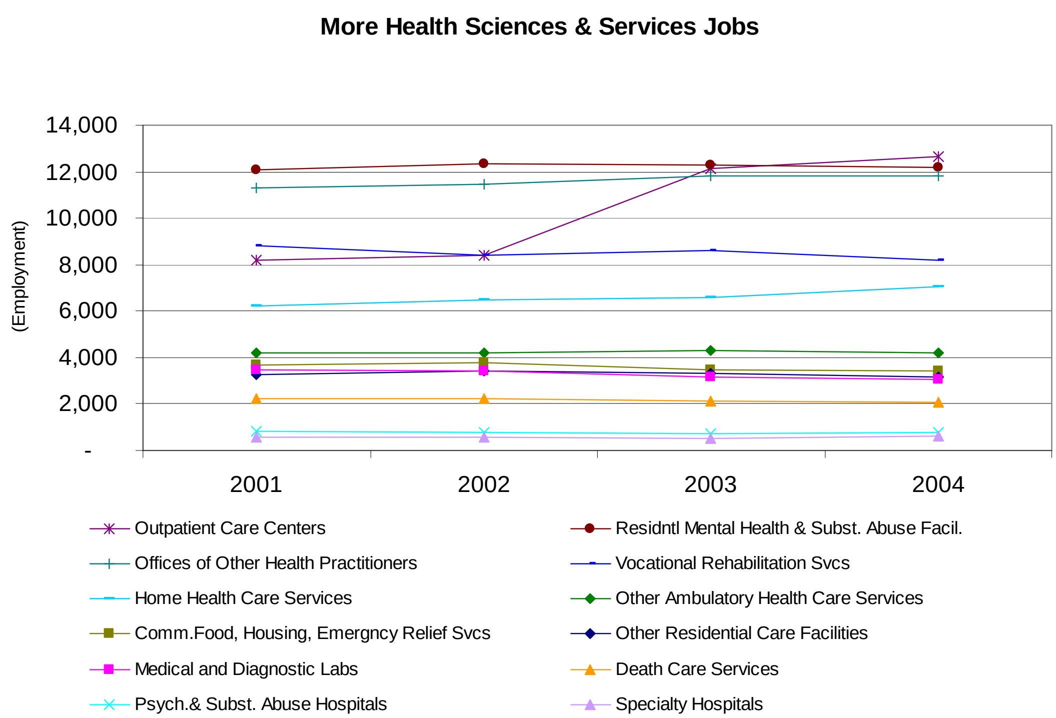
From 2001-2004, Health Sciences & Services reported overall job growth 5,200 jobs or 1.6%. During this period, employment peaked in 2002, and then decreased slightly each of the next two years.

Within the cluster, the General Medical & Surgical Hospitals sub-sector provides the most jobs, with over 93,700 jobs in 2004; this was an increase of almost 22% from 2001-2004. The second largest sub-sector was Scientific Research & Development Services, with over 40,600 jobs and job losses of over 3%. Next, Offices of Physicians reported almost 35,600 jobs in 2004, but experienced losses of over 31%. Fourth, the Offices of Dentists sub-sector reported 27,100 jobs and 1.6% growth during the period.
These were followed by Nursing Care Facilities, with almost 18,800 jobs (down almost 5%); Pharmaceutical & Medicine Manufacturing with 14,700 jobs (up almost 10%); Medical Equipment & Supplies Manufacturing with 14,500 jobs (down less than 1%); and, Community Care Facilities for the Elderly with almost 13,400 jobs (down 6.5%).

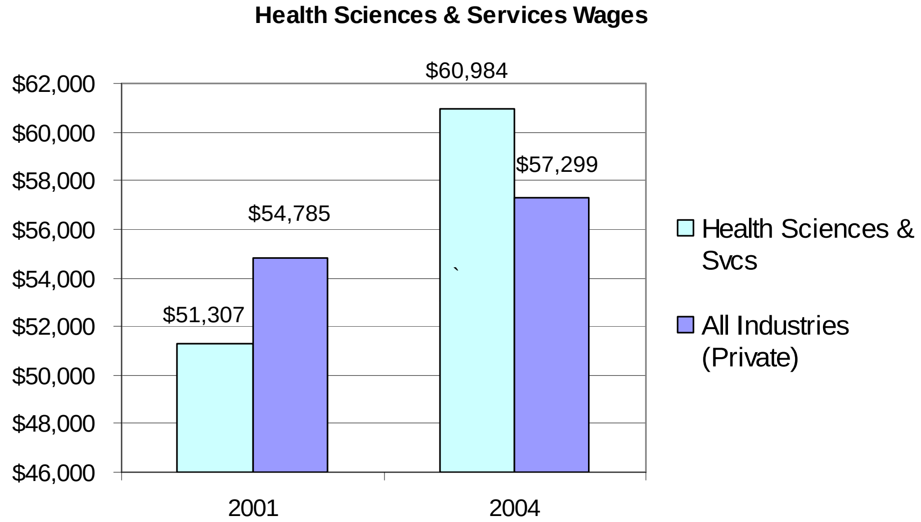
The following graph shows the change in employment from 2001 to 2004 for the top eight sub-sectors:



The next graph shows the change in employment from 2001 to 2004 for the remaining sub-sectors:



The cluster's average annual wage for the region in 2004 was $60,984, up almost 19% from the 2001 average of $51,307. Health Sciences & Services provides 14% of the region's economic base jobs. The following chart graphs the changes from 2001 to 2004 and compares the industry's average with the region's overall average wage (all industries).



The following table provides data on cluster employment by sub-sector for 2001-2004:

Bay Area Region
Health Sciences & Services
(Thousands of Jobs)

	2001	2002	2003	2004
Pharmaceutical & Medicine Manufacturing	13.4	14.1	13.7	14.7
Medical Equipment & Supplies Manufacturing	14.6	14.0	14.0	14.5
Scientific Research & Development Services	42.0	42.4	40.7	40.6
Offices of Physicians	51.8	55.0	34.6	35.6
Offices of Dentists	26.7	27.0	27.1	27.1
Offices of Other Health Practitioners	11.3	11.4	11.8	11.8
Outpatient Care Centers	8.2	8.4	12.1	12.7
Medical & Diagnostic Laboratories	3.5	3.4	3.2	3.1
Home Health Care Services	6.2	6.5	6.6	7.0
Other Ambulatory Health Care Services	4.2	4.2	4.3	4.2
General Medical & Surgical Hospitals	76.9	79.7	95.8	93.7
Psychiatric & Substance Abuse Hospitals	0.8	0.8	0.7	0.8
Specialty (except Psychiatric & Substance Abuse) Hospitals	0.6	0.6	0.5	0.6
Nursing Care Facilities	17.9	19.1	18.6	18.8
Residential Mental Health & Substance Abuse Facilities	12.1	12.3	12.3	12.2
Community Care Facilities for the Elderly	14.3	14.4	14.5	13.4
Other Residential Care Facilities	3.2	3.4	3.3	3.2
Comm. Food, Housing, Emergency & Other Relief Services	3.7	3.8	3.5	3.4
Vocational Rehabilitation Services	8.8	8.4	8.6	8.2
Death Care Services	2.2	2.2	2.1	2.1

Source: California Employment Development Department

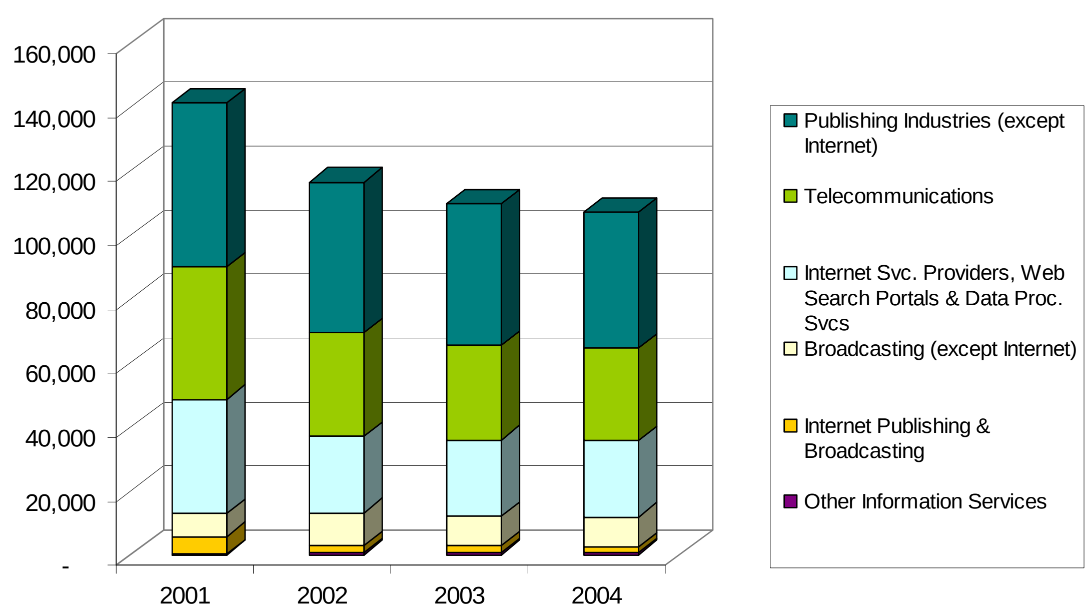
BASIC INFORMATION SERVICES

Basic Information Services includes the main sectors Broadcasting; Internet Publishing & Broadcasting; Telecommunications; Internet Service Providers, Web Search Portals & Data Processing; and, Other Information Services. The industry provided over 91,100 jobs in 2004, which represented 4% of the economic base jobs and almost 3% of all jobs in the region.

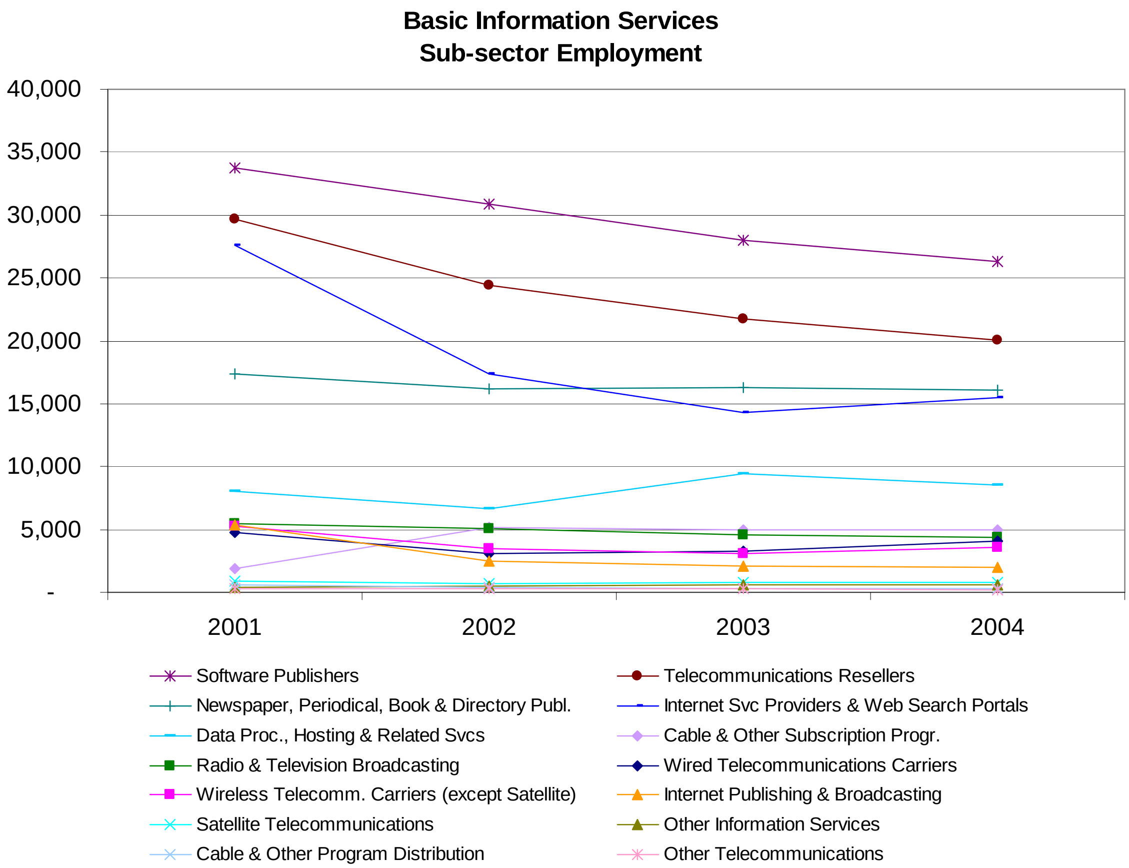
From 1990-2002, Basic Information Services employment increased from about 90,000 jobs in 1990 to 117,100 jobs in 2002. Employment had peaked in 2000 at 143,100.

From 2001-2004, job losses continued, going from about 141,200 jobs in 2001 to 107,200 jobs in 2004; a loss of almost 34,000 jobs, or over 24%. The largest sector is Publishing Industries (except Internet), with almost 42,400 jobs or 39.5% of the industry's jobs (down 17%). This was followed by Telecommunications, with almost 29,000 jobs or 27% of the industry's jobs in 2004 (down 30%). Internet Service Providers, Web Search Portals & Data Processing Services was third, with 24,000 jobs (down over 32%).

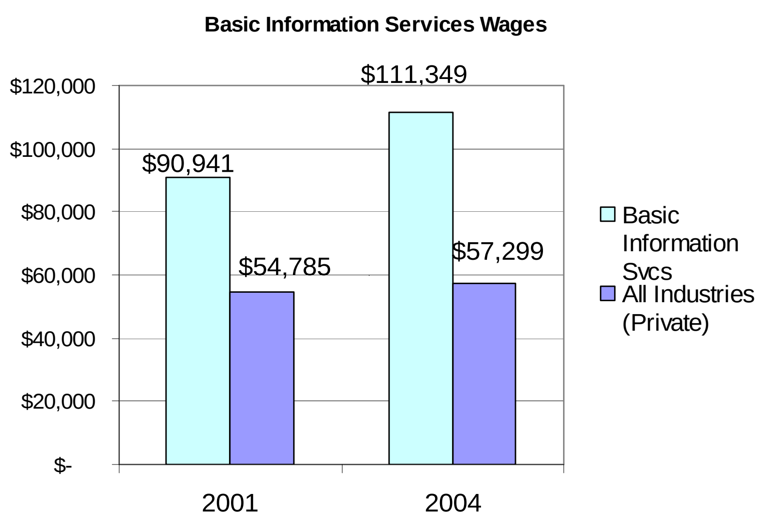
Basic Information Services Jobs



The leading sub-sectors within Basic Information Services are Software Publishers, with over 26,300 jobs in 2004 (down 22% from 2001); Telecommunications Resellers, with almost 20,100 jobs (down 32%); Newspaper, Periodical, Book, and Directory Publishers, with 16,100 jobs (down over 7%); and, Internet Service Providers & Web Search Portals, with almost 15,500 jobs (down 44%).



The industry's average annual wage for the region in 2004 was $111,349, up over 22% from the 2001 average of $90,941. Basic Information Services provides 5% of the region's economic base jobs. The following chart graphs the changes from 2001 to 2004 and compares the industry's average with the region's overall average wage (all industries).



The following table provides employment data for the industry:

Bay Area Region Basic Information Services (Thousands of Jobs)	1990	2000	2002	2004
Publishing Industries (except Internet)	16.7	17.8	15.9	42.4
Software publishers	10.8	28.4	30.7	26.3
Broadcasting, except Internet	5.4	6.5	10.2	9.3
Internet publishing and broadcasting	0.1	7.8	2.4	2.0
Telecommunications	39.2	41.5	32.1	29.0
ISPs and data processing	7.6	40.7	25.3	24.0
Other information services	0.4	0.4	0.5	0.6
Basic Information Services	**80.2**	**143.1**	**117.1**	**107.2**

Source: EDD – Employment numbers for 1990, 2000 and 2002 shown above were taken from the first economic base report.

PROFESSIONAL, SCIENTIFIC, TECHNICAL & MANAGEMENT SERVICES

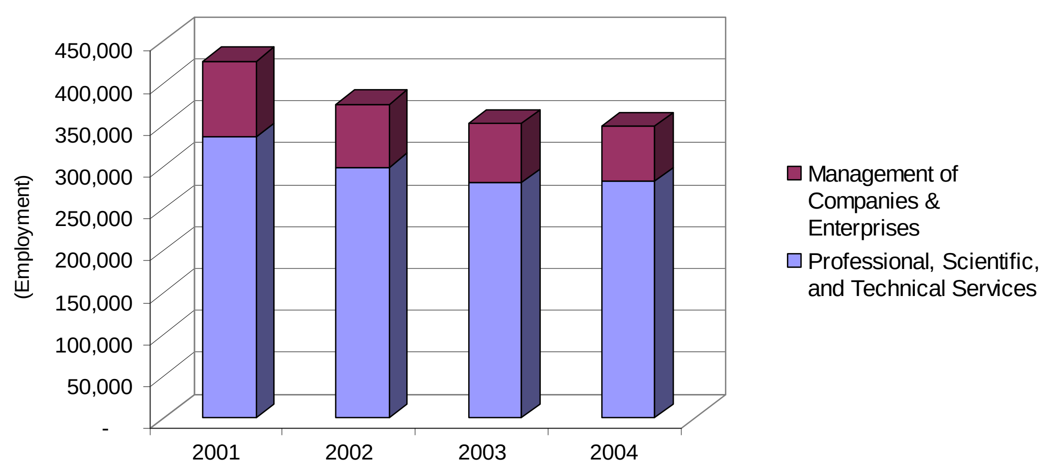
Professional, Scientific, Technical & Management Services combines two sectors; Professional, Scientific & Technical Services and Management of Companies & Enterprises.

The Management of Companies and Enterprises sector is a newer category introduced by the NAICS coding system. There appears to have been significant changes in the use of the NAICS codes within this sector since its introduction, where companies originally using this classification may no longer identify themselves in the sector. In some or many cases, they may be identifying themselves within the Professional, Scientific & Technical Services sector.

The Professional, Scientific, Technical & Management Services industry was the third largest component of the Bay Area Region's economic base in 2004, providing 348,000 jobs; 15% of the jobs in the economic base and over 10% of all jobs in the region.

Within this industry, the Professional, Scientific & Technical Services sector represented over 81% of the industry's jobs; Management of Companies & Enterprises represented almost 19%.

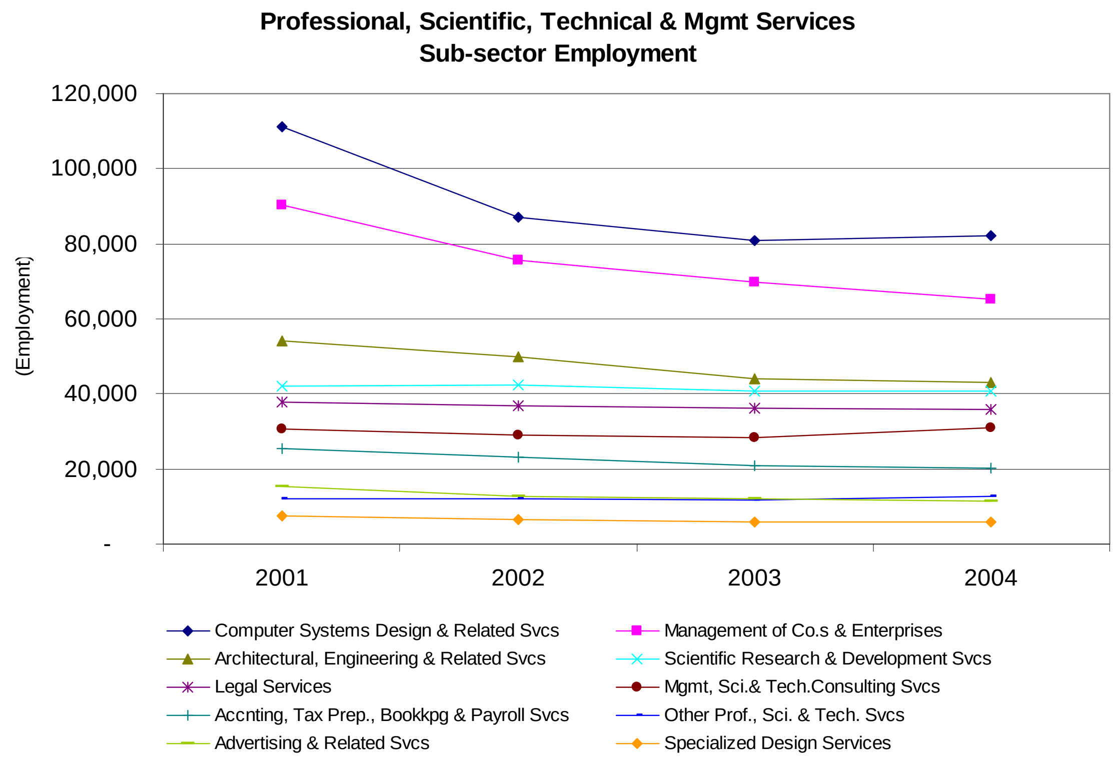
Professional, Scientific, Technical & Management Services



For the period 1990-2002, employment in the industry rose from 265,500 jobs in 1990 to 447,400 in 2000, and then dropped through 2002. The data source from the original base report indicated there were 376,800 jobs in 2002, while the current data source reports 375,000.

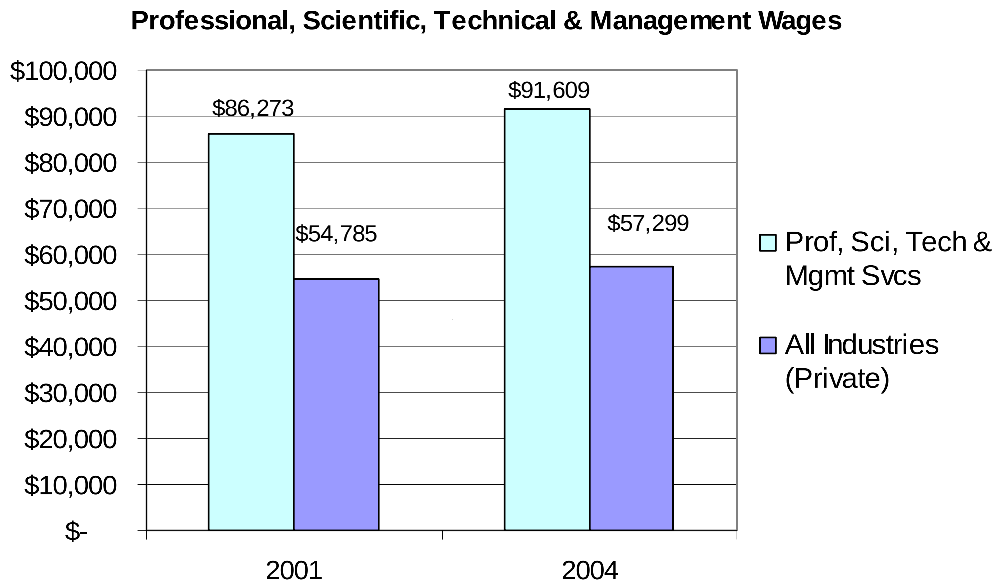
For the period 2001 – 2004, the Professional, Scientific, Technical & Management Services industry reported overall job losses of about 78,200 jobs, a loss of over 18%. Employment steadily decreased since 2001.

Within the industry, the sub-sectors providing the most jobs in 2004 were Computer Systems Design & Related Services, with over 82,200 jobs (down 26%); Management of Companies & Enterprises, with 65,100 jobs (down 28%); Architectural, Engineering & Related Services, with over 43,100 jobs (down over 20%); and, Scientific Research & Development, with over 40,600 jobs (down just over 3%).



The industry's average annual wage for the region in 2004 was $91,609, up over 6% from the 2001 average of $86,273. Professional, Scientific, Technical & Management Services reported the highest average wage in the region's economic base and provides 15% of the region's economic base jobs.

The next graph shows the changes from 2001 to 2004 and compares the industry's average with the region's overall average wage (all industries).



The following table provides information on employment at the sub-sector level, listed in NAICS code order:

Bay Area Region
Professional, Scientific, Technical & Management Services
(Thousands of jobs)

	1990	2000	2002	2004
Legal Services	33.0	36.5	37.4	36.0
Accounting, Tax Prep, Bookkpg & Payroll	22.8	24.2	23.2	20.3
Architectural, Engineering & Related Svcs	38.8	53.8	50.3	43.1
Specialized Design Services	3.7	7.1	6.4	5.8
Computer Systems Design & Related Svcs	26.4	112.6	87.1	82.2
Mgmt, Sci. & Tech. Consulting Svcs	16.8	31.9	28.9	30.9
Sci. Research & Devel. Svcs	26.8	39.3	42.6	40.6
Advertising & Related Svcs	12.9	17.7	12.5	11.4
Other Prof., Sci. & Tech. Svcs	10.1	12.1	12.1	12.7
Mgmt of Co.s & Enterprises	74.2	112.2	76.3	65.1

Source: California Employment Development Department
Employment numbers for 1990, 2000 and 2002 were taken from the first economic base report.

ENTERTAINMENT & TOURISM

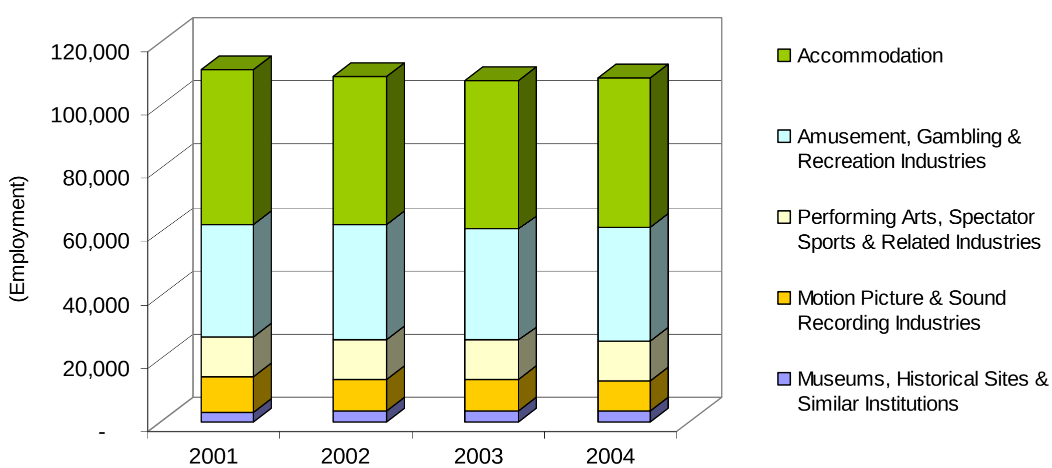
The Entertainment & Tourism industry combines Accommodation with Arts, Entertainment & Recreation, and also includes Motion Picture & Sound Recording Industries; it does not include Food Services. This is consistent with the original economic base reports for urban areas.

The Entertainment & Tourism industry is the eighth largest component of the Bay Area Region's economic base. The industry provides almost 5% of the economic base jobs, and over 3% of all jobs in the region.

From 1990-2002, the Entertainment & Tourism industry employment fluctuated around 100,000 jobs. From 1990 – 1996, employment slowly dipped and then returned to about 100,000 jobs. From 1997-2002, employment grew slightly through 2000 to over 111,000 jobs and then leveled off and decreased back down to about 108,800 jobs by 2002. During the 2001-2004 period, Entertainment & Tourism jobs declined and then fluctuated around 108,000 jobs from 2002 through 2004, with 108,600 jobs reported in 2004. The net change for the period was a loss of almost 2,600 jobs, or over 2%.

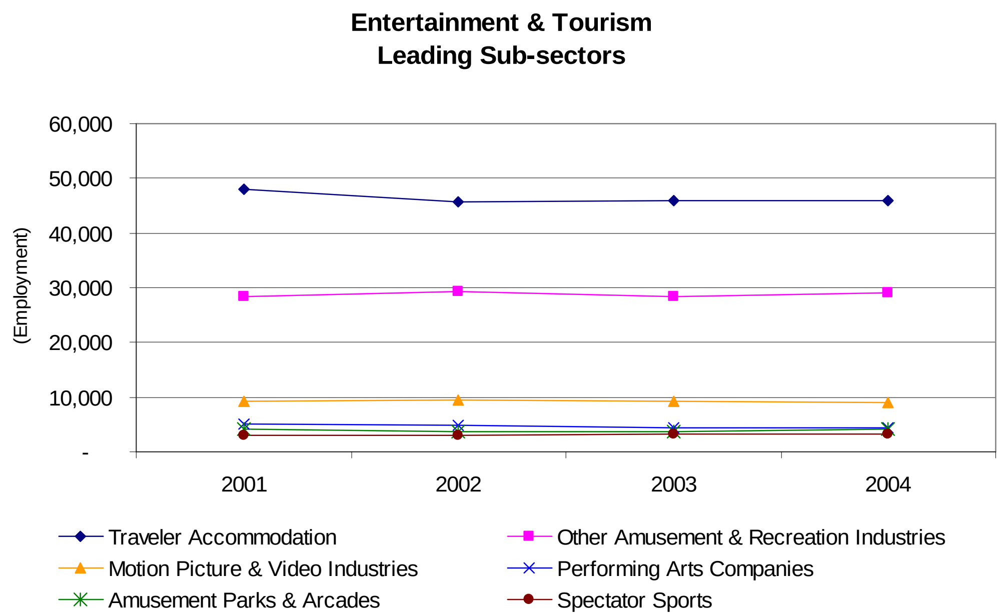
The largest sector, Accommodation, reported almost 47,300 jobs in 2004, with losses of almost 4%; next, the Amusement, Gambling & Recreation Industries sector reported almost 36,100 jobs and 1% growth. The third largest sector, Performing Arts, Spectator Sports & Related Industries, reported almost 12,500 jobs, with losses of less than 1% for the period.

Entertainment & Tourism Jobs

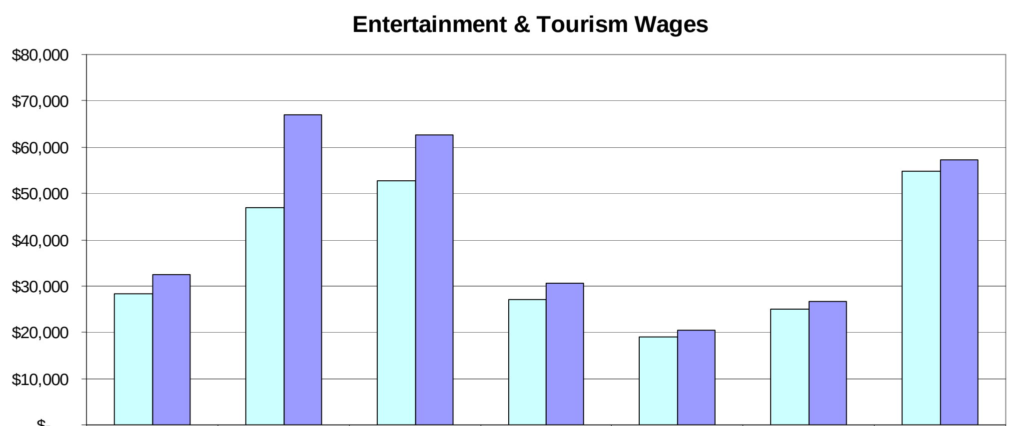


Two of the five major sectors reported job growth. Amusement, Gambling & Recreation Industries added over 400 jobs (led by Other Amusement & Recreation Industries); and, Museums, Historical Sites & Similar Institutions added less than 50 jobs.

Across all sectors, the leading sub-sectors were Traveler Accommodation (almost 46,000 jobs in 2004); Other Amusement & Recreation Industries (over 29,100 jobs); and Motion Picture & Video Industries (over 9,100 jobs). Taking a closer look at Other Amusement & Recreation Industries, the majority of the jobs were found in Fitness & Recreational Sports Centers, with 17,700 jobs in 2004, followed by Golf Courses & Country Clubs with 6,500 jobs.



The industry's average annual wage for the region in 2004 was $32,498, up almost 15% from the 2001 average of $28,359. Entertainment & Tourism provides 5% of the region's economic base jobs. Within the industry, the Motion Picture & Sound Recording Industries sector reported the highest average wage, at $66,999. The following chart graphs the changes from 2001 to 2004 and compares the industry's average with the region's overall average wage (all industries).



	Entertainment & Tourism - Urban	Motion Picture & Sound Recording	Perf. Arts, Spect.Sports & Related	Museums, Historical Sites & Similar	Amusement, Gambling & Recreation	Accommodation	All Industries (Private)
2001	$28,359	$46,971	$52,742	$27,163	$18,923	$24,914	$54,785
2004	$32,498	$66,999	$62,561	$30,505	$20,540	$26,748	$57,299

The following table provides data on all sub-sectors in the industry, listed in NAICS code order:

Bay Area Region
Entertainment & Tourism
(Thousands)

	1990	2000	2002*	2004
Motion Picture & Sound Recording Industries	7.8	11.1	10.2	9.7
Performing Arts, Spectator Sports, and Related Industries	21.2	12.2	12.0	12.5
Museums, Historical Sites, and Similar Institutions	1.7	3.0	3.7	3.1
Amusement, Gambling, and Recreation Industries	23.8	36.8	36.3	36.1
Accommodation	43.6	47.9	46.6	47.3
Entertainment & Tourism	98.1	111.0	108.8	108.6

Source: California Employment Development Department
Employment numbers for 1990, 2000 and 2002 were taken from the first economic base report.

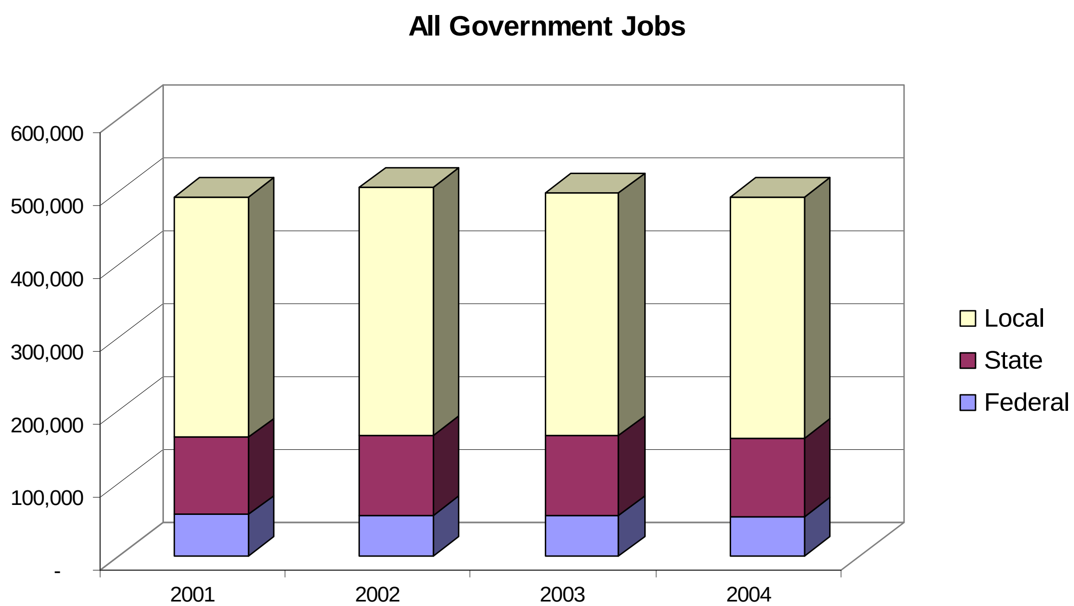
ALL GOVERNMENT

All Government includes federal, state and local government jobs. Jobs in public education are reported in the state and local government sectors. Government jobs also include defense (reported at the federal level), police, firefighting and public services. In the original economic base report, Local Government was not included.

All Government is the second largest component of the Bay Area Region's economic base. This industry provided over 21% of the economic base jobs in the region in 2004, and almost 15% of all jobs in the region.

From 1990-2002, Federal Government jobs fell as both military base and civilian job levels declined by nearly 40,000 total jobs. These losses were partially offset by an increase of 13,000 jobs in State Government, primarily in State Education.

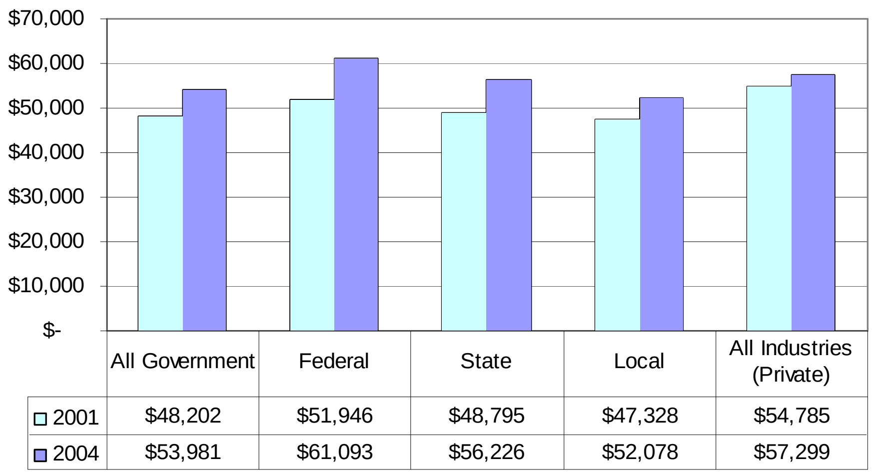
In 2004, Local Government represented over 67% of all government jobs; State Government represented almost 22%, and Federal Government represented almost 11%.



During the period 2001-2004, All Government jobs fluctuated slightly, with a minimal overall decrease of 0.1%, from 492,400 jobs to 491,700 jobs. State Government grew by less than 2%, from 105,900 jobs to 107,600 jobs, with all growth occurring in State Government Education (up almost 3%). Local Government grew very slightly, by 0.2%, from 329,900 jobs to 330,700 jobs; Local Government Education actually lost 1,700 jobs, down 1%, while Other Local Government grew by 2,000 jobs, or 1.3%. During this same time, Federal Government reported job losses of 5.5%, dropping from 56,800 jobs to 53,700 jobs.

All Government average annual wages include the wages for a broad spectrum of jobs, including elected officials and executive branch, judicial, defense, law enforcement, firefighting, education and other public administration jobs. The industry's average annual wage for the region in 2004 was $53,981, up 12% from the 2001 average of $48,202. Within All Government, the average annual wage for Federal Government was $61,093; the average for State Government was $56,226; and, the average annual wage for Local Government was $52,078. The following chart graphs the changes from 2001 to 2004 and compares the industry's average with the region's overall average wage (all industries).

All Government Wages



	All Government	Federal	State	Local	All Industries (Private)
2001	$48,202	$51,946	$48,795	$47,328	$54,785
2004	$53,981	$61,093	$56,226	$52,078	$57,299

The following table shows employment for each level of government from 2001-2004:

Bay Area Region
All Government

(Thousands of Jobs)

	2001	2002	2003	2004
Federal Government (includes Defense)	56.8	56.0	55.9	53.7
Federal Government Defense	2.2	2.1	1.9	2.0
State Government (includes Education)	105.9	109.4	109.5	107.6
State Government Education	56.5	58.8	59.3	58.1
Local Government (includes Education)	329.9	340.0	332.8	330.7
Local Government Education	163.2	167.9	161.3	161.5

Source: California Employment Development Department
Some government employment may be suppressed due to confidentiality requirements.

APPENDIX A: Definition of Industry Sectors and Clusters by NAICS Codes

The following lists the major industries and clusters included in the economic base reports, and defines them by NAICS code and classification. Most of these are defined at the three-digit and/or four-digit NAICS code levels, but some are defined at the five-digit and/or six-digit NAICS code levels.

THE FOOD CHAIN

Distribution

4244	Grocery and Related Product Wholesalers
4245	Farm Product Raw Material Merchant Wholesalers
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers
42491	Farm Supplies Merchant Wholesalers
4452	Specialty Food Stores
49313	Farm Product Warehousing and Storage

Processing

3111	Animal Food Manufacturing
3112	Grain and Oilseed Milling
3113	Sugar and Confectionery Product Manufacturing
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing
3115	Dairy Product Manufacturing
3116	Animal Slaughtering and Processing
3117	Seafood Product Preparation and Packaging
3118	Bakeries and Tortilla Manufacturing
3119	Other Food Manufacturing
322215	Nonfolding Sanitary Food Container Manufacturing
32616	Plastics Bottle Manufacturing
327213	Glass Container Manufacturing
332115	Crown and Closure Manufacturing
332431	Metal Can Manufacturing
31211	Soft Drink and Ice Manufacturing
31212	Breweries
31213	Wineries
31214	Distilleries

Production

1111	Oilseed and Grain Farming
1113	Fruit and Tree Nut Farming
11141	Food Crops Grown Under Cover
11193	Sugarcane Farming
11194	Hay Farming
111991	Sugar Beet Farming
111992	Peanut Farming

1112	Vegetable and Melon Farming
111998	All Other Miscellaneous Crop Farming
1121	Cattle Ranching and Farming
1122	Hog and Pig Farming
1123	Poultry and Egg Production
1124	Sheep and Goat Farming
1125	Animal Aquaculture
1129	Other Animal Production
1141	Fishing
1142	Hunting and Trapping

Support

1151	Support Activities for Crop Production
1152	Support Activities for Animal Production
22131	Water Supply and Irrigation Systems
23711	Water and Sewer Line and Related Structures Construction
32192	Wood Container and Pallet Manufacturing
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
33311	Agricultural Implement Manufacturing
333294	Food Product Machinery Manufacturing
42382	Farm and Garden Machinery and Equipment Merchant Wholesalers
54194	Veterinary Services

CONSTRUCTION

236	Construction of Buildings
2361	Residential Building Construction
2362	Nonresidential Building Construction
237	Heavy and Civil Engineering Construction
2371	Utility System Construction
2372	Land Subdivision
2373	Highway, Street, and Bridge Construction
2379	Other Heavy and Civil Engineering Construction
238	Specialty Trade Contractors
2381	Foundation, Structure, and Building Exterior Contractors
2382	Building Equipment Contractors
2383	Building Finishing Contractors
2389	Other Specialty Trade Contractors

MANUFACTURING VALUE CHAIN

Design

5413	Architectural, Engineering, and Related Services
5414	Specialized Design Services
5416	Management, Scientific, and Technical Consulting Services
5419	Other Professional, Scientific, and Technical Services

Production

3111	Animal Food Manufacturing
3112	Grain and Oilseed Milling
3113	Sugar and Confectionery Product Manufacturing
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing
3115	Dairy Product Manufacturing
3116	Animal Slaughtering and Processing
3117	Seafood Product Preparation and Packaging
3118	Bakeries and Tortilla Manufacturing
3119	Other Food Manufacturing
3121	Beverage Manufacturing
3122	Tobacco Manufacturing
3131	Fiber, Yarn, and Thread Mills
3132	Fabric Mills
3133	Textile and Fabric Finishing and Fabric Coating Mills
3141	Textile Furnishings Mills
3149	Other Textile Product Mills
3151	Apparel Knitting Mills
3152	Cut and Sew Apparel Manufacturing
3159	Apparel Accessories and Other Apparel Manufacturing
3161	Leather and Hide Tanning and Finishing
3162	Footwear Manufacturing
3169	Other Leather and Allied Product Manufacturing
3211	Sawmills and Wood Preservation
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing
3219	Other Wood Product Manufacturing
3221	Pulp, Paper, and Paperboard Mills
3222	Converted Paper Product Manufacturing
3231	Printing and Related Support Activities
3241	Petroleum and Coal Products Manufacturing
3251	Basic Chemical Manufacturing
3252	Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments M
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
3255	Paint, Coating, and Adhesive Manufacturing
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing
3259	Other Chemical Product and Preparation Manufacturing
3261	Plastics Product Manufacturing
3262	Rubber Product Manufacturing
3271	Clay Product and Refractory Manufacturing
3272	Glass and Glass Product Manufacturing
3273	Cement and Concrete Product Manufacturing
3274	Lime and Gypsum Product Manufacturing
3279	Other Nonmetallic Mineral Product Manufacturing
3311	Iron and Steel Mills and Ferroalloy Manufacturing
3312	Steel Product Manufacturing from Purchased Steel
3313	Alumina and Aluminum Production and Processing
3314	Nonferrous Metal (except Aluminum) Production and Processing
3315	Foundries
3321	Forging and Stamping

3322	Cutlery and Handtool Manufacturing
3323	Architectural and Structural Metals Manufacturing
3324	Boiler, Tank, and Shipping Container Manufacturing
3325	Hardware Manufacturing
3326	Spring and Wire Product Manufacturing
3327	Machine Shops-Turned Product- and Screw, Nut, and Bolt Manufacturi ng
3328	Coating, Engraving, Heat Treating, and Allied Activities
3329	Other Fabricated Metal Product Manufacturing
3331	Agriculture, Construction, and Mining Machinery Manufacturing
3332	Industrial Machinery Manufacturing
3333	Commercial and Service Industry Machinery Manufacturing
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equ
3335	Metalworking Machinery Manufacturing
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing
3339	Other General Purpose Machinery Manufacturing
3341	Computer and Peripheral Equipment Manufacturing
3342	Communications Equipment Manufacturing
3343	Audio and Video Equipment Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufac
3346	Manufacturing and Reproducing Magnetic and Optical Media
3351	Electric Lighting Equipment Manufacturing
3352	Household Appliance Manufacturing
3353	Electrical Equipment Manufacturing
3359	Other Electrical Equipment and Component Manufacturing
3361	Motor Vehicle Manufacturing
3362	Motor Vehicle Body and Trailer Manufacturing
3363	Motor Vehicle Parts Manufacturing
3364	Aerospace Product and Parts Manufacturing
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing
3372	Office Furniture (including Fixtures) Manufacturing
3379	Other Furniture Related Product Manufacturing

Logistics

4811	Scheduled Air Transportation
4812	Nonscheduled Air Transportation
4821	Rail Transportation
4831	Deep Sea, Coastal, and Great Lakes Water Transportation
4832	Inland Water Transportation
4841	General Freight Trucking
4842	Specialized Freight Trucking
4861	Pipeline Transportation of Crude Oil
4862	Pipeline Transportation of Natural Gas
4869	Other Pipeline Transportation
4881	Support Activities for Air Transportation
4882	Support Activities for Rail Transportation
4883	Support Activities for Water Transportation
4884	Support Activities for Road Transportation
4885	Freight Transportation Arrangement

4889	Other Support Activities for Transportation
4911	Postal Service
4921	Couriers
4922	Local Messengers and Local Delivery
4931	Warehousing and Storage

WHOLESALE TRADE

423	Merchant Wholesalers, Durable Goods
424	Merchant Wholesalers, Nondurable Goods
425	Wholesale Electronic Markets & Agents & Brokers

RETAIL TRADE

441	Motor Vehicle and Parts Dealers
4411	Automobile Dealers
4412	Other Motor Vehicle Dealers
4413	Automotive Parts, Accessories, and Tire Stores
442	Furniture and Home Furnishings Stores
4421	Furniture Stores
4422	Home Furnishings Stores
443	Electronics and Appliance Stores
4431	Electronics and Appliance Stores
444	Building Material and Garden Equipment and Supplies Dealers
4441	Building Material and Supplies Dealers
4442	Lawn and Garden Equipment and Supplies Stores
445	Food and Beverage Stores
4451	Grocery Stores
4452	Specialty Food Stores
4453	Beer, Wine, and Liquor Stores
446	Health and Personal Care Stores
4461	Health and Personal Care Stores
447	Gasoline Stations
4471	Gasoline Stations
448	Clothing and Clothing Accessories Stores
4481	Clothing Stores
4482	Shoe Stores
4483	Jewelry, Luggage, and Leather Goods Stores
451	Sporting Goods, Hobby, Book, and Music Stores
4511	Sporting Goods, Hobby, and Musical Instrument Stores
4512	Book, Periodical, and Music Stores
452	General Merchandise Stores
4521	Department Stores
4529	Other General Merchandise Stores
453	Miscellaneous Store Retailers
4531	Florists
4532	Office Supplies, Stationery, and Gift Stores
4533	Used Merchandise Stores
4539	Other Miscellaneous Store Retailers
454	Nonstore Retailers

4541	Electronic Shopping and Mail-Order Houses
4542	Vending Machine Operators
4543	Direct Selling Establishments

BASIC INFORMATION SERVICES

511	Publishing Industries (except Internet)
515	Broadcasting (except Internet)
516	Internet Publishing and Broadcasting
517	Telecommunications
518	Internet Service Providers, Web Search Portals, and Data Processing Serv
519	Other Information Services

5111	Newspaper, Periodical, Book, and Directory Publishers
5112	Software Publishers
5151	Radio and Television Broadcasting
5152	Cable and Other Subscription Programming
5161	Internet Publishing and Broadcasting
5171	Wired Telecommunications Carriers
5172	Wireless Telecommunications Carriers (except Satellite)
5173	Telecommunications Resellers
5174	Satellite Telecommunications
5175	Cable and Other Program Distribution
5179	Other Telecommunications
5181	Internet Service Providers and Web Search Portals
5182	Data Processing, Hosting, and Related Services
5191	Other Information Services

REAL ESTATE & RENTAL & LEASING

531	Real Estate
5311	Lessors of Real Estate
5312	Offices of Real Estate Agents and Brokers
5313	Activities Related to Real Estate
532	Rental and Leasing Services
5321	Automotive Equipment Rental and Leasing
5322	Consumer Goods Rental
5323	General Rental Centers
5324	Commercial and Industrial Machinery and Equipment Rental and Leasing
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)

PROFESSIONAL, SCIENTIFIC, TECHNICAL & MANAGEMENT SERVICES

541	Professional, Scientific, and Technical Services
5411	Legal Services
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services
5413	Architectural, Engineering, and Related Services
5414	Specialized Design Services

5415	Computer Systems Design and Related Services
5416	Management, Scientific, and Technical Consulting Services
5417	Scientific Research and Development Services
5418	Advertising and Related Services
5419	Other Professional, Scientific, and Technical Services
551	Management of Companies and Enterprises
5511	Management of Companies and Enterprises

ADMINISTRATIVE & SUPPORT & WASTE SERVICES

561	Administrative and Support Services
5611	Office Administrative Services
5612	Facilities Support Services
5613	Employment Services
5614	Business Support Services
5615	Travel Arrangement and Reservation Services
5616	Investigation and Security Services
5617	Services to Buildings and Dwellings
5619	Other Support Services
562	Waste Management and Remediation Services
5621	Waste Collection
5622	Waste Treatment and Disposal
5629	Remediation and Other Waste Management Services

HEALTH SCIENCES & SERVICES

3254	Pharmaceutical and Medicine Manufacturing
3391	Medical Equipment and Supplies Manufacturing
5417	Scientific Research and Development Services
6211	Offices of Physicians
6212	Offices of Dentists
6213	Offices of Other Health Practitioners
6214	Outpatient Care Centers
6215	Medical and Diagnostic Laboratories
6216	Home Health Care Services
6219	Other Ambulatory Health Care Services
6221	General Medical and Surgical Hospitals
6222	Psychiatric and Substance Abuse Hospitals
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals
6231	Nursing Care Facilities
6232	Residential Mental Retardation, Mental Health and Substance Abuse Facilities
6233	Community Care Facilities for the Elderly
6239	Other Residential Care Facilities
6242	Community Food and Housing, and Emergency and Other Relief Services
6243	Vocational Rehabilitation Services
8122	Death Care Services

ENTERTAINMENT & TOURISM – URBAN REGIONS

512	Motion Picture and Sound Recording Industries
711	Performing Arts, Spectator Sports, and Related Industries
712	Museums, Historical Sites, and Similar Institutions
713	Amusement, Gambling, and Recreation Industries
721	Accommodation

ENTERTAINMENT & TOURISM – RURAL REGIONS

711	Performing Arts, Spectator Sports, and Related Industries
712	Museums, Historical Sites, and Similar Institutions
713	Amusement, Gambling, and Recreation Industries
721	Accommodation
722	Food Services and Drinking Places

OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)

811	Repair and Maintenance
8111	Automotive Repair and Maintenance
8112	Electronic and Precision Equipment Repair and Maintenance
8113	Commercial and Industrial Machinery and Equipment
8114	Personal and Household Goods Repair and Maintenance
812	Personal and Laundry Services
8121	Personal Care Services
8122	Death Care Services
8123	Drycleaning and Laundry Services
8129	Other Personal Services
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations
8131	Religious Organizations
8132	Grantmaking and Giving Services
8133	Social Advocacy Organizations
8134	Civic and Social Organizations
8139	Business, Professional, Labor, Political, and Similar Organizations
814	Private Households
8141	Private Households

ALL GOVERNMENT

- Federal Government
  - Department of Defense
  - Other Federal Government
- State Government
  - State Government Education
  - Other State Government
- Local Government
  - Local Government Education
  - Other Local Government

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